

KITSELMAN

CATALOGUE No 11

Coiled Spring Fencing

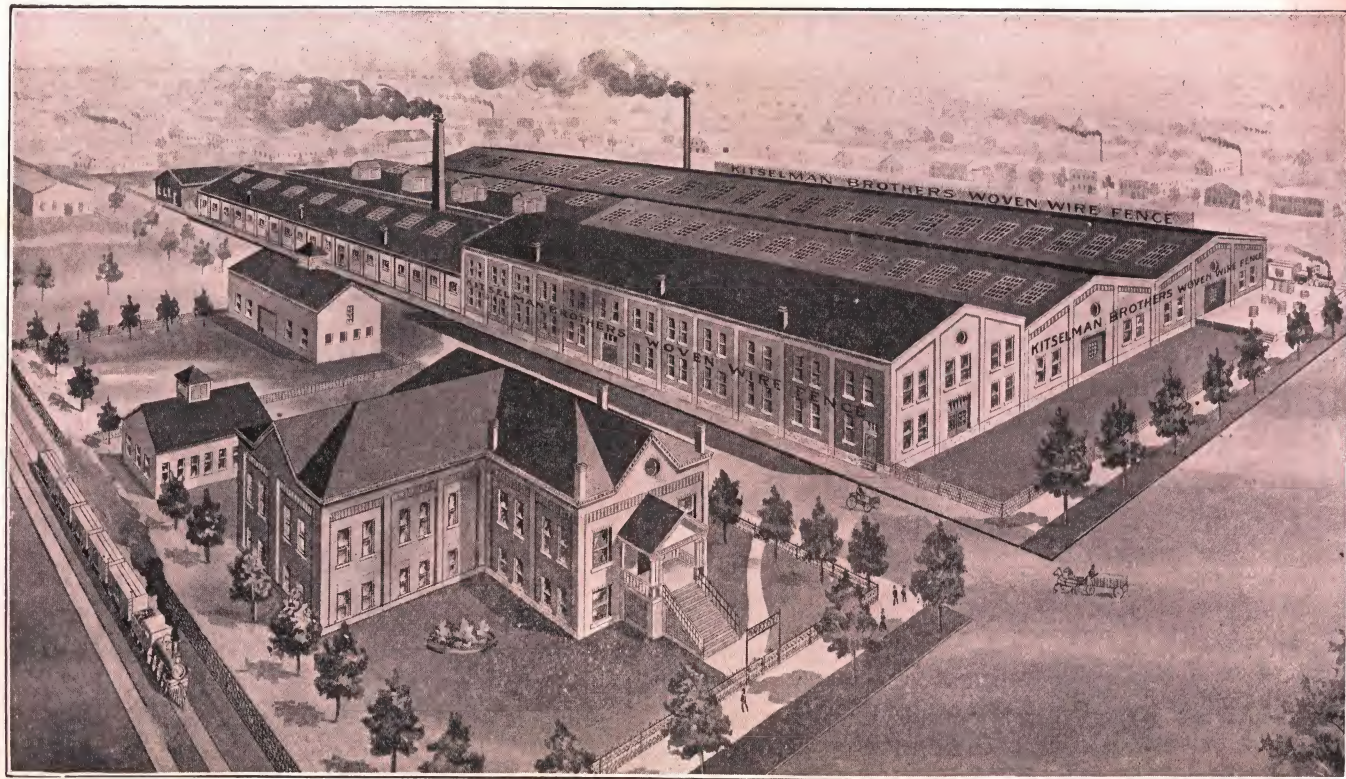


MONGIE

KITSELMAN BROTHERS

MANUFACTURERS

INDIANA



Main Office and Fence Factory of Kitzelman Bros., Muncie, Ind.

TO YOU!

We make fence--good fence--of High Carbon Coiled Spring Steel Wire--and know that it's good because we make and galvanize the wire that goes into it. Isn't this the kind you want? We sell direct to the farmer on 30 days' trial. Full particulars in the following pages.

KITSELMAN BROTHERS.

FEBRUARY 1, 1906.

\$25,000.00 INDEMNIFYING BOND.

Know all men by these presents: That Kitselman Brothers, incorporated, of Muncie, Indiana, as principal, and A. L. Kitselman, D. M. Kitselman, C. M. Kitselman and E. F. Kitselman, as surety, are held and firmly bound unto The Merchants National Bank, of Muncie, Indiana, in the sum of

TWENTY-FIVE THOUSAND DOLLARS

lawful money of the United States, for the payment of which sum well and truly made, hereby bind themselves firmly by these presents. Dated this 25th day of January, 1906.

The conditions of the foregoing Bond are such that: Whereas, the said Kitselman Brothers, being manufacturers of woven wire fence, advertise and agree to sell fence on 30 days trial; that if said fence fails to give satisfaction for 30 days from date of its receipt and is returned as per the terms of said 30-day trial offer, the said Kitselman Brothers agree to return in full the money paid for the fence so returned.

Now, therefore, if the said Kitselman Brothers fully and truly comply with said agreement and return in full the amount of money paid for any fence that may be returned in accordance with the terms of their 30-day trial offer, then this bond shall be of no force and effect.

Should the said Kitselman Brothers fail to return the money on return of the fence, as per their 30-day trial offer, then this bond to be in full force and effect for whatever amount or amounts so failed to be returned, and on receipt by said The Merchants National Bank, of bill or information showing fence to have been paid for, and Railroad Agent's receipt showing return of the fence, as per the terms of said 30-day trial offer, said bank is hereby authorized to remit to any customer or customers the money paid for said fence and to charge said amounts to our account, and we, by the terms of this bond, hereby fully and without reservation bind and obligate ourselves to reimburse or pay to the said The Merchants National Bank the total amount of any sum or sums so paid.

Witness our hands the day and date first above written.



A. L. Kitselman
D. M. Kitselman
C. M. Kitselman

KITSELMAN BROTHERS,

By A. L. Kitselman President.
D. M. Kitselman

HARDIN ROADS, PRESIDENT
FRED KLOPPER, VICE PRESIDENT

4852

F. A. BROWN, CASHIER
B. F. SHROYER, ASST. CASHIER



CAPITAL \$ 150,000.00. * SURPLUS \$ 110,000.00.

MUNCIE, IND.

Jan. 31st., '06.

To Whom It May Concern:-

Referring to the Company of Kitselman Bros., Incorporated, of Muncie, Indiana, and their plan of selling their wire fence on thirty days trial,-

We beg to state that this Company is composed of thoroughly reliable business men. They are gentlemen of large business experience, and also are men of large means; men who can, in all respects, be depended upon to carry out all of their agreements. We have known Kitselman Bros. for many years, and have never yet heard any complaints about their manner of doing business.

The Company has also given us an approved bond in the sum of Twenty-five Thousand Dollars to secure the return of purchase money in accordance with the conditions of their thirty days guarantee plan. We will cheerfully accept on deposit any money sent us by those desiring to take advantage of this plan, and will see that it is properly applied.

Respectfully yours,

Nardin Roads President.

THEO. F. ROSE, PRESIDENT.
CHAS. F. KOONTZ, VICE PRES.

No 2234.

EDWARD OLCOTT, CASHIER
C. ROY HATHAWAY, ASST. CASHIER

The Union National Bank

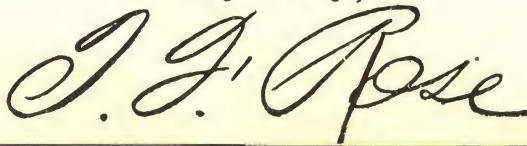
CAPITAL \$200,000.00.
MUNCIE, INDIANA.

Jan. 9th, 1906.

To Whom It May Concern:

This is to certify that Kitselman Bros. are extensive manufacturers of this city. We are personally acquainted with the gentlemen composing this company, and it affords us much pleasure to say that they are men of strict integrity and business character, and any orders entrusted to them will receive careful, prompt and fair consideration. We make no hesitation in heartily recommending them for your patronage.

Very truly,

A large, elegant handwritten signature in dark ink, reading "J. F. Rose". The signature is written in a cursive style with a prominent initial "J" and a long, sweeping underline.

President.

Delaware County National Bank
United States Depository
Muncie, Indiana.

January 31, 1906.

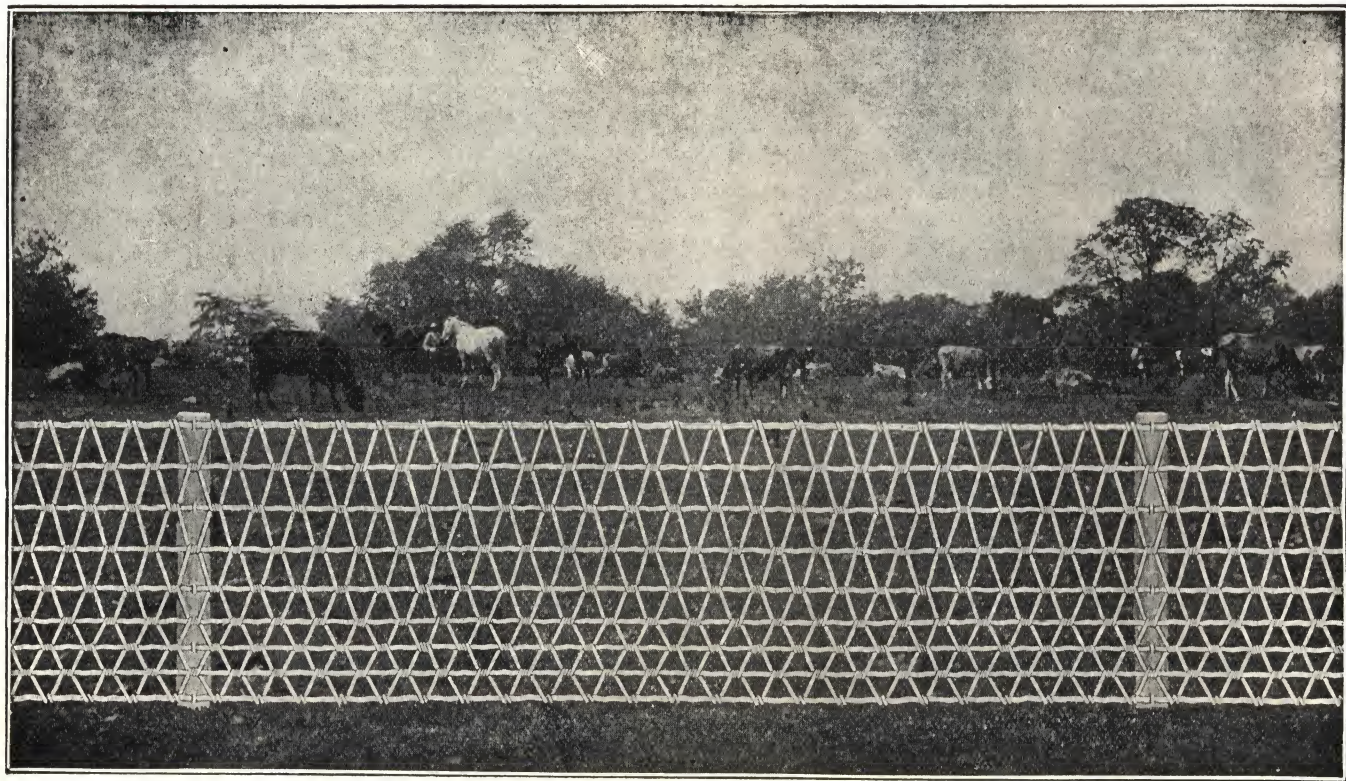
W. E. HITCHCOCK, PRESIDENT.
H. C. HAYMOND, VICE PRESIDENT.
C. H. CHURCH, CASHIER.

TO WHOM IT MAY CONCERN:-

This is to certify that Kitselman Brothers, of this city, are extensive manufacturers of wire and wire fencing. The gentlemen composing this company are good business men of high moral character and the company amply responsible financially for all their contracts. We take pleasure in saying that any one desiring to purchase goods of their make can do so with perfect safety and feel assured of fair and honorable treatment and of their doing exactly as they advertise and agree to do.

Yours truly,

W. E. Hitchcock President.



STANDARD COILED SPRING FARM FENCE.

Standard Coiled Spring Farm Fence.

IT required years of effort and experiment to construct a fence so practical and scientific as our **Standard Coiled Spring Fence**. The lower half is made absolutely pig tight, while the upper portion will turn all kinds of large stock. The margin wires are No. 9, intermediate line wires No. 12, and mesh wires No. 14. For marginal and intermediate line wires we use **High Carbon Coiled Spring Steel Wire**, heavily galvanized. Mesh wires are of milder temper, but also heavily galvanized. Mesh 6 inches.

Your Confidence.

We realize that we cannot secure your order unless you have confidence, not only in our fence, but in our integrity and responsibility as well. The custom of buying direct from the manufacturer is not only growing, but is being encouraged by decided advantages accruing to those who have adopted the plan. There may have been a time when the people doubted the propriety of sending their money in advance of the receipt of goods, but it is gratifying to state that indecision has gradually given way to a full degree of confidence.

There are reasons for this. The process of buying and selling have been placed upon such high plane of business integrity by reputable and responsible manufacturers, that a matter of distance or lack of personal acquaintanceship no longer interferes. Again, there never was a time when the postal authorities were so exacting in the matter of compelling a strict performance of every promise by those who solicit the patronage of the people by mail, and scarcely a day passes but that the use of the mails is denied to those who have wilfully misrepresented their goods, or failed or refused to comply with promises made to their customers. Many publications that carry advertisements, refuse to give publicity to concerns that do not implicitly carry out every promise or obligation to the people. So careful are many of these publications in their effort to weed out the swindler and irresponsible, that they self-obligate themselves to reimburse any subscriber who suffers loss by patronizing any advertiser who uses their columns.

We court the rigid application of the most stringent laws by the postal officers of the government, and applaud the action of publications in their efforts to safeguard the interests of the people, for the removal

of the swindler and the dishonest and unscrupulous from the ranks of commercial business, leaves the legitimate manufacturer in full possession of the field, and the people with a full degree of confidence and protection.

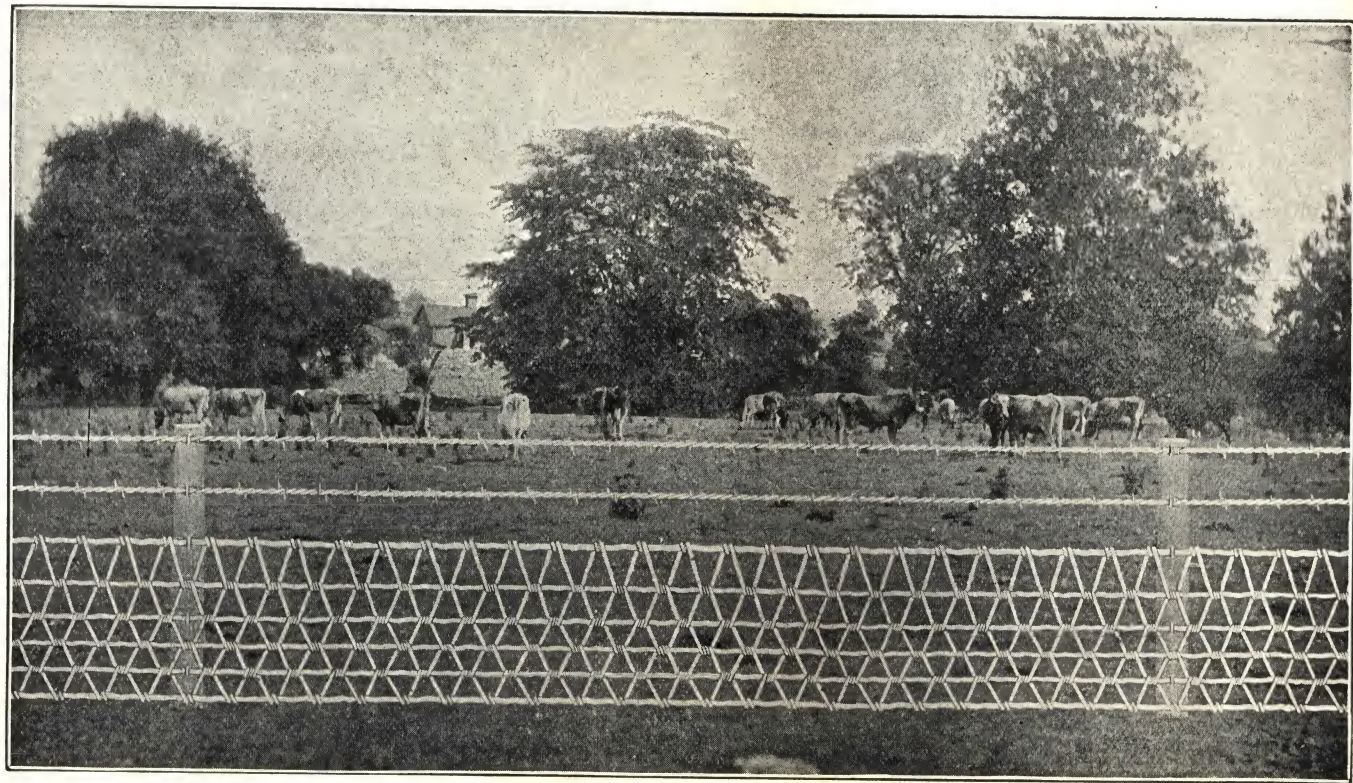
We invite your order strictly upon the high grade merit of our fence, and upon our reputation for honest dealing and faithful discharge of every promise or obligation. We have been dealing with the people direct for seventeen years, and the fact that every year shows a marked increase in the volume of business, should be indisputable evidence, not only of the merit of our fence, but of our integrity of purpose.

As to our responsibility, we refer you to Union National Bank, Merchants' National Bank, Delaware County National Bank, all of Muncie, Indiana, or any commercial agency. With this explanation we hope you will feel free to deal with us, being assured that you may be not only the Judge, but the jury and witness.

Catalogue Answers Questions.

It is the purpose of this catalogue to completely cover the ground of fence construction, as well as to fully describe the various styles of Kitzelman Fence. It is intended also to be explicit in the manner of ordering and making remittances. We ask its careful reading that you may be fully informed, but if you wish information not given herein, or if any point is not explained to your complete satisfaction, please write us and we will take pleasure in going into detail until you have the information you desire.

Don't lose sight of the fact that wire fencing is usually sold at a price proportionate to quality, cost of wire used, and the labor of making. The cheapest in price usually means poorest in quality.



STANDARD COILED SPRING HOG FENCE.

Standard Coiled Spring Hog Fence.

OUR **Standard Coiled Spring Hog Fence** is identical with our Standard Coiled Spring Farm Fence, except that it is 26 inches high only. Marginal wires are No. 9, intermediate line wires are No. 12, and mesh wires No. 14. Size of mesh, 6 inches. This Fence is strong enough to resist unusual strain, and if it is desired to turn larger stock, two barbed wires stretched above makes a fence effective against stock of any size.

Pioneer Fence Builders.

We originated the Diamond Mesh Fence as early as 1888, and are pioneer manufacturers of this particular style. The Diamond Mesh stands to-day unquestioned as the strongest form of fence construction, and its excellency is due to our persistent determination to bring it to its present high state of development.

To us it is a matter of pride that we devoted a series of years to the development of a fence, striving constantly for greater merit, greater utility, and greater strength, when competition all about us was working seemingly toward an opposite goal. That our industry has been rewarded is fully proven by the fact that each succeeding year has shown an increased demand.

All styles of fence with line or parallel wires running lengthwise through the mesh or diamond, are known as the Kitselman Fence. It has withstood all kinds of weather, all kinds of tests. Those who could not imitate it, condemned it. Those who could not condemn it, imitated it. Out of every contest it has emerged a complete victor, and stands to-day unsurpassed for strength and compactness.

Advantages of Coiled Spring Wire.

It is impossible to contribute long life to Woven Wire Fence without ample provision for contraction and expansion. Of all the improvements incorporated into fence construction during the past 15 years, the most important, by far, was the introduction of our High Carbon Coiled Spring Steel Wire. If you have used it, this fact is already apparent. If you have not used it, you have yet to appreciate its superiority.

Prior to the use of Coiled Spring Wire, a soft wire was used, which

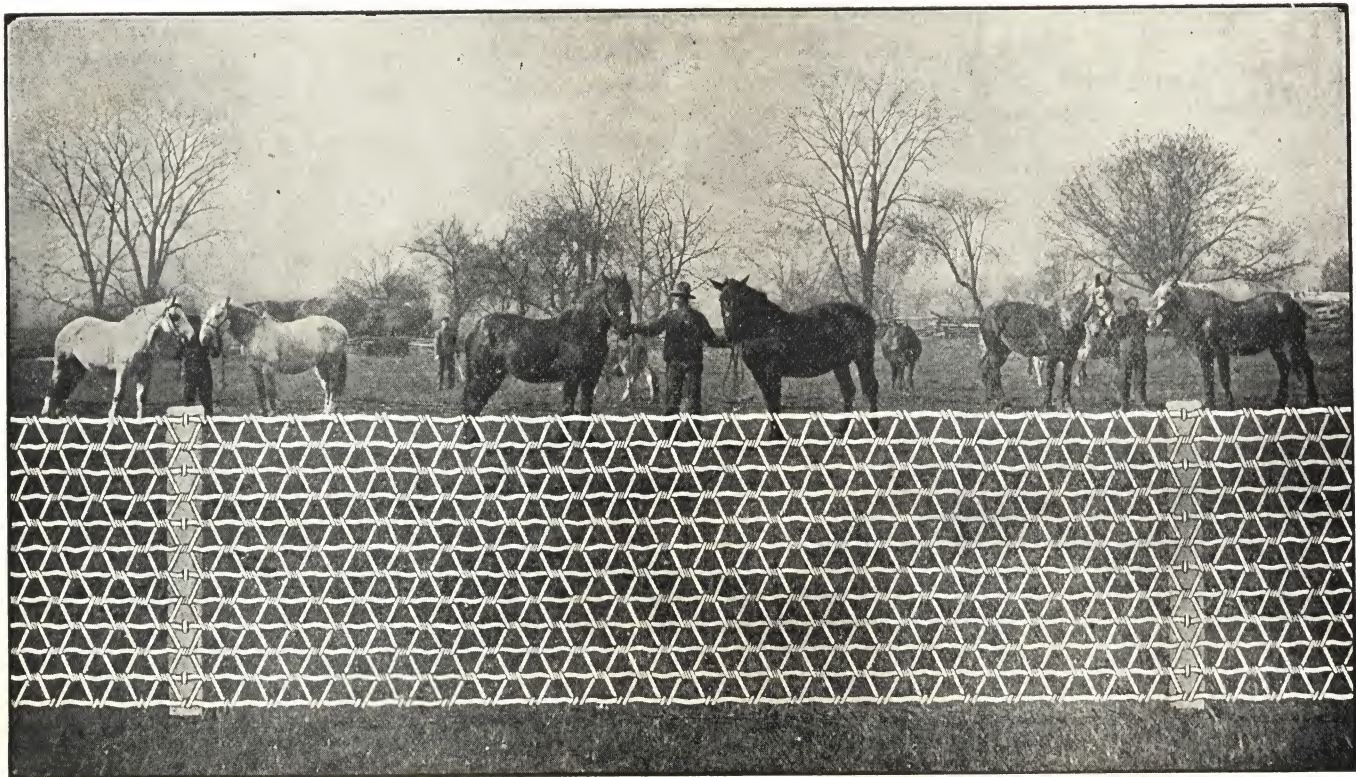
had the property of expansion, but would not return to its former position, resulting in a loose, baggy fence, whose tension must be restored by use of ratchets, necessitating constant attention. By the introduction of our High Carbon Coiled Spring Steel Wire, the use of ratchets was made unnecessary, and a perfect high tension was secured and maintained in all kinds of weather without requiring personal care or attention.

This was not the only advantage accruing from its use. A better grade of wire was made necessary in fence construction. It had to be hard and firm, or its advantage over soft wire would be lost. It was then that our High Carbon Wire was adopted, completely solving the problem of contraction and expansion, adding greater strength and rigidity to the fence, and contributing to its long life and uprightness.

Our Own Wire Mill.

We own and control our own wire mill. This was made necessary because of our inability to always buy the high standard quality of wire required in the construction of our fence. All wire used is drawn, tempered, and heavily galvanized under competent supervision, and we are to-day among the largest manufacturers in the United States.

There is a notion prevalent among the manufacturers of wire that any kind of wire is good enough for fence construction, and it is this indifference to quality that drove us to the manufacture of our own wire, that it might always be high grade and uniform. We believe in the use of wire made from good material, heavily galvanized, and in every way reliable as the life of the fence absolutely depends upon this precaution. It is this watchfulness and determination for superior quality that has made the Kitselman Fence the Standard of excellence.



EXTRA HEAVY COILED SPRING FARM FENCE.

Extra Heavy Coiled Spring Farm Fence.

THE preceding page shows our Extra Heavy, Closely-woven, Self-regulating, **Coiled Spring Farm Fence.** The marginal wires are No. 9, line wires No. 12, **High Carbon Coiled Spring Wire;** mesh wires, No. 14. The line wires are four and one-half inches apart the full height of the fence. There are 23 wires in the 50 inch height of this fence: 12 line wires and 11 mesh wires, making one of the strongest and most substantial fences on the market. Size of mesh 6 inches.

How Wire is Made.

The raw material of wire is "wire rods" and the raw material of wire rods is termed "billets." A steel billet for the purpose of making wire rods is 4 inches square, about 3 feet long and weigh about 125 pounds each. These billets are put into a furnace and heated to a white heat, then taken to rolls and rolled through sixteen passes, which brings it to No. 5 gauge, or a little larger than 3-16 of an inch in diameter. The last roll they enter revolves at a speed of about 500 revolutions per minute, and delivers 1,125 feet of rod per minute. There are in a modern rod mill, five rods going through at the same time, which would in all make 5,625 feet, or equal to about 618 pounds per minute, or about 370,000 pounds per day of ten hours' work. These rods are rolled into bundles by automatic reeling machines as fast as made and are then ready for the wire mill.

The first thing done with rods after entering the wire mill is to clean them—that is, take off all scales and dirt. This is done by loading about 1,000 pounds on a pin, then this quantity is lifted by a steam crane and put into a large tub containing sulphuric acid and then rinsed in a tub of water. Then they are dipped in a coating of lime and dried in a dry-house. The object of lime coating is to act as a lubricator, as steel will not draw unless there is a kind of a go-between to keep one surface from coming in contact with the other—hence lime or thick grease is used for this purpose. The object of dry-house, which is a soft or mild heat, is to absorb any acid the water may have left on the rods to prevent same from making rods brittle.

The rods are now ready for the wire drawer, where they are taken and put on what is called a reel, after which a drawer takes an end of a

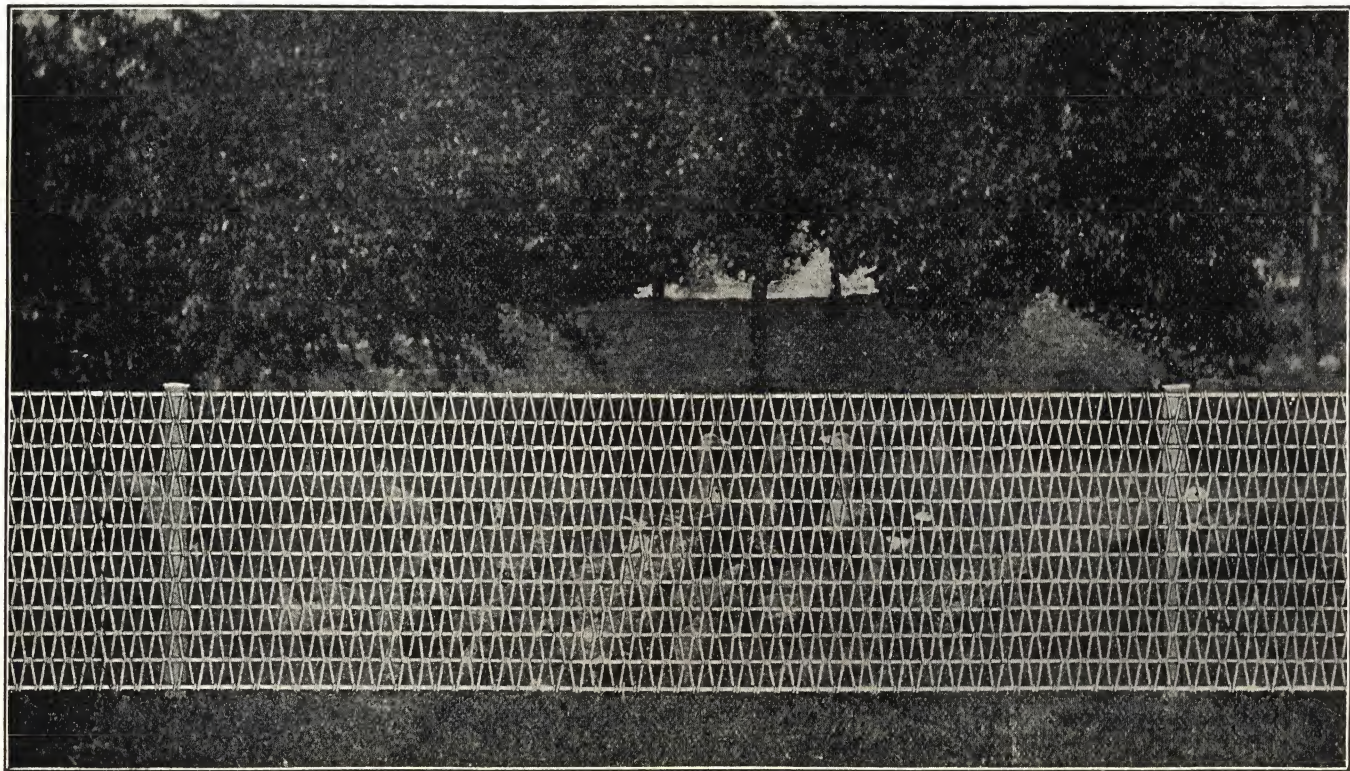
rod and points or sharpens same, then passes it through the die, fastens it to the block and starts same in motion.

A wire die is made from chilled iron or steel, 5 in. long, 2 in. wide and 1 inch thick and contains 16 holes. As fast as each hole wears out, it is reamed out larger and is used again for larger-sized wire. Each hole will last for about 500 pounds of wire to be drawn through.

A wire block which draws wire through the die is shaped like an ordinary car wheel, laid flat with flange down, and revolves at the rate of 60 revolutions per minute. Each time wire passes through the die it is reduced in size about 1-32 to 1-16 of an inch, according to the size started with. After wire has been drawn a few sizes it becomes hard or brittle, and if drawn any more would break easily—hence it becomes necessary to soften or anneal same before going further. This is done by putting the wire into a furnace, where it is fired to the required heat and then pulled out and let gradually cool off, after which it is again cleaned, washed and coated with lime, and taken back to wire drawer to be drawn again until it becomes necessary to again anneal or finish for shipment.

It might be well to add that rods are rolled hot, but after rod enters wire mill it is drawn cold, and in drawing, the die does not cut the wire, but stretches it. In other words, the finer it gets the longer it gets, same as pulling rubber.

It is our aim to conduct our business in such a manner that no cause for complaint shall arise; but should it occur we ask no higher privilege than an opportunity to adjust it. We want your business and absolute confidence, and will do our best to satisfy you.



"K-B" POULTRY FENCE.

"K-B" Poultry Fence.

OUR "K-B" Poultry Fence is made of the best quality of **Steel Wire**, thoroughly galvanized, and is many times stronger than regular poultry netting. We guarantee it to turn sheep, hogs, dogs, wolves, rabbits, and poultry, No top or bottom rail required. Posts can be set 30 feet apart with perfect safety. The parallel wires are only four and one half inches apart, and the mesh or diamond only 2 inches at its widest point. No. 12 wire for top and bottom, No. 16 for intermediate line wires, and No. 18 for mesh wires.

How Wire is Galvanized.

The process of galvanizing wire is intricate. It is first drawn through what is called an annealing furnace. This is a large furnace made of brick, fire brick, and fire clay tile; the tiles are placed end to end, their openings forming a continuous channel, and are so arranged that they can be kept red hot; the wire in passing through the heated tiles also becomes red hot without really coming in contact with the flame. The furnaces are usually about 50 feet in length; the wire is drawn through from one end, then around a wheel or drum, and returned through another tile in the furnace. This double passage through the furnace anneals and softens the wire, the speed at which it passes through the furnace regulating the degree of temper. If it travels slowly, the wire will be soft; if rapidly, the wire will be hard. As it comes out of the furnace it is carried some distance through space for the purpose of cooling it before running through a tank of acid. The purpose of the acid is to clean the wire of any scale or foreign substance. From the acid tank it passes into a tank of water for the purpose of washing off the acid. It is then carried over a large iron drying plate forming the top of a furnace and which is kept continuously at a high temperature. By this process every particle of moisture is evaporated from the wire surface before passing into the spelter pan. If it were not thoroughly dried the spelter would not perfectly adhere. This spelter pan, or tank, is made of heavy boiler plate and is from 12 to 16 feet in length, two to four feet in width, and from two to two and one-half feet in depth. It contains several tons of spelter which must be kept at a certain degree of heat in order to insure its perfect adhesion to the wire. As it leaves the spelter it passes through what is called a

"wipe." This "wipe" is formed from sections of asbestos rope about 1¼ inch in circumference and 3 inches in length. They are so arranged that the wire passes between them,—over one and under the other,—the top one being forced down on the wire by an impression screw. This "wipe" takes off the surplus spelter. The wire then passes through running water for the purpose of cooling it and then to a large frame located ten to twenty feet beyond, bearing several reels whereon the wire is wound in bundles for shipment. These reels furnish the power by which the wire is drawn through the annealing furnace, acid and water tanks, over the drying pans, and through the spelter and "wipes."

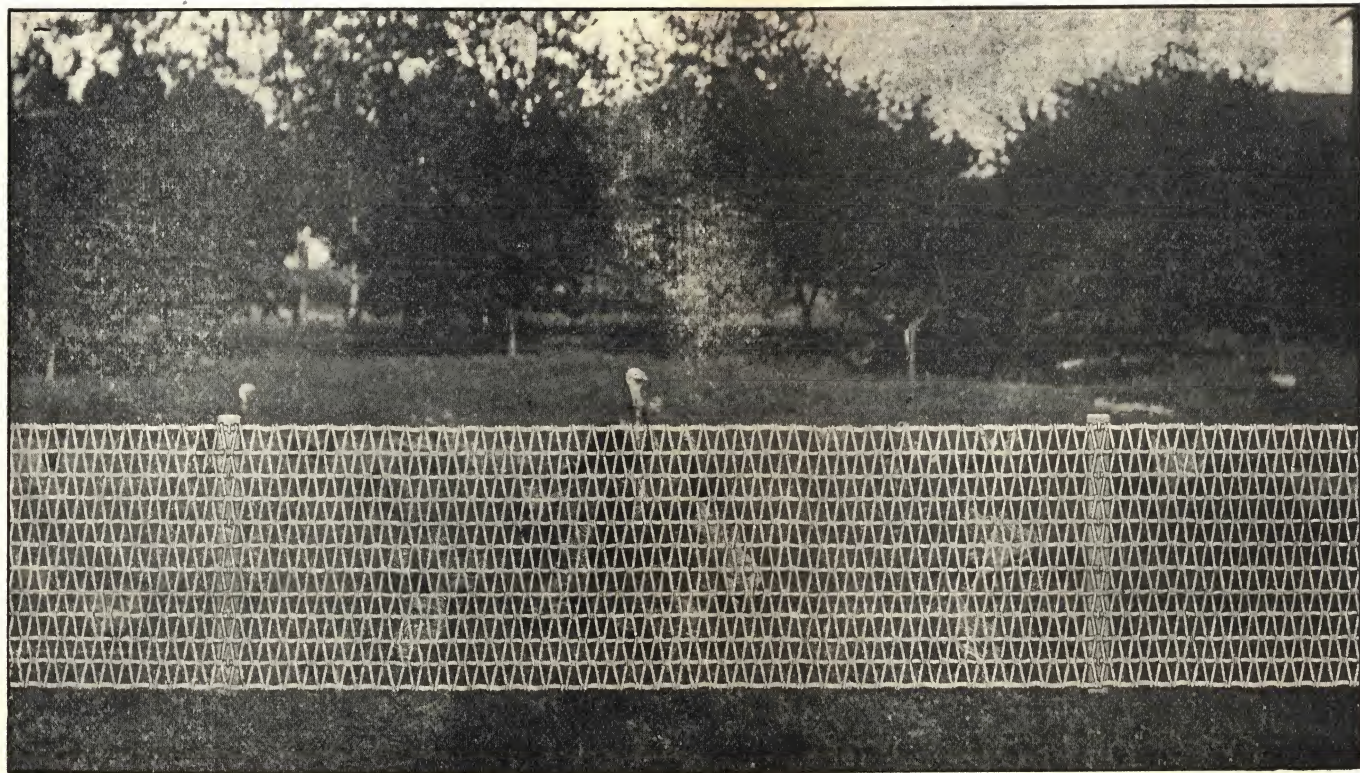
All these processes must be carefully guarded and regulated to insure perfect and effective galvanizing. Irregularity in any one process will render the completed product correspondingly inferior.

Good Galvanizing.

Good galvanizing can be done only by having annealing furnace in proper condition, right degree of heat, acid just right, and by using best grades of spelter, kept at proper degree of heat, and moderate tension only, kept on the wipes. The wire must then pass through all of these at proper rate of speed, and good galvanized wire—the very best—is the result. This is the way we do it and we produce the best quality of wire.

Keep Fence Rows Clean.

A fence row where a wire fence is used should be kept clean, or at least free from bushes that grow up and completely shade or cover the fence. Anything having a tendency to shade or hold dampness will, to a certain extent, lessen the life of the fence. Sunlight is necessary to a growing crop, and is likewise a benefit to the lasting qualities of a fence.



EXTRA HEAVY POULTRY AND STOCK FENCE.

Extra Heavy Poultry and Stock Fence.

TOP and bottom wires are No. 10, intermediate line wires No. 13, **High Carbon Coiled Spring Steel Wire**, all heavily galvanized. Mesh wires No. 16. As a combination Stock and Poultry Fence, this style has no equal. It is at least ten times stronger than regular netting and can be stretched to a tension that insures uprightness: It will turn all kinds of stock, and we have full confidence that it will satisfy any one needing a stock and poultry fence. Size of mesh 2 inches.

Aluminized Fencing.

Only a few years ago Aluminum was a rare metal and worth \$40.00 per pound. Its availability for a multitude of uses has stimulated its manufacture to an extent that it is now obtainable at 33 cents per pound. The cheapening of this useful metal has called it into many uses where its great cost had rendered it, heretofore, prohibitive.

One of the most effective complaints against woven wire fence as manufactured in recent years, has been the ineffectiveness of the galvanizing against the corrosive influence of the climate. That the process of galvanizing has been so poorly executed by many manufacturers, thus rendering it almost worthless as a protection against corrosion, is a fact to which many farmers can fully attest.

In this connection it affords us much pleasure to state that we have found a mixture of an Aluminum alloy with commercially pure spelter highly satisfactory, since its tendency to harden gives a firmer set to the galvanizing coat. It also causes the spelter to flow with a greater degree of smoothness and adhere to the wire with greater tenacity.

We have found also that this is not the only advantage growing out of the mixture of this alloy with spelter, for it is to be remembered that it is impossible to rust Aluminum, and its addition to the galvanizing spelter, therefore, offers a greater resistance against climatic influences to an extent that practically doubles the life of the wire.

Of course, the use of aluminum with galvanizing spelter adds materially to the cost of the galvanizing, but its advantage has proven so decisive in rendering the coating smoother, firmer, and more durable, that we feel amply rewarded for having adopted it.

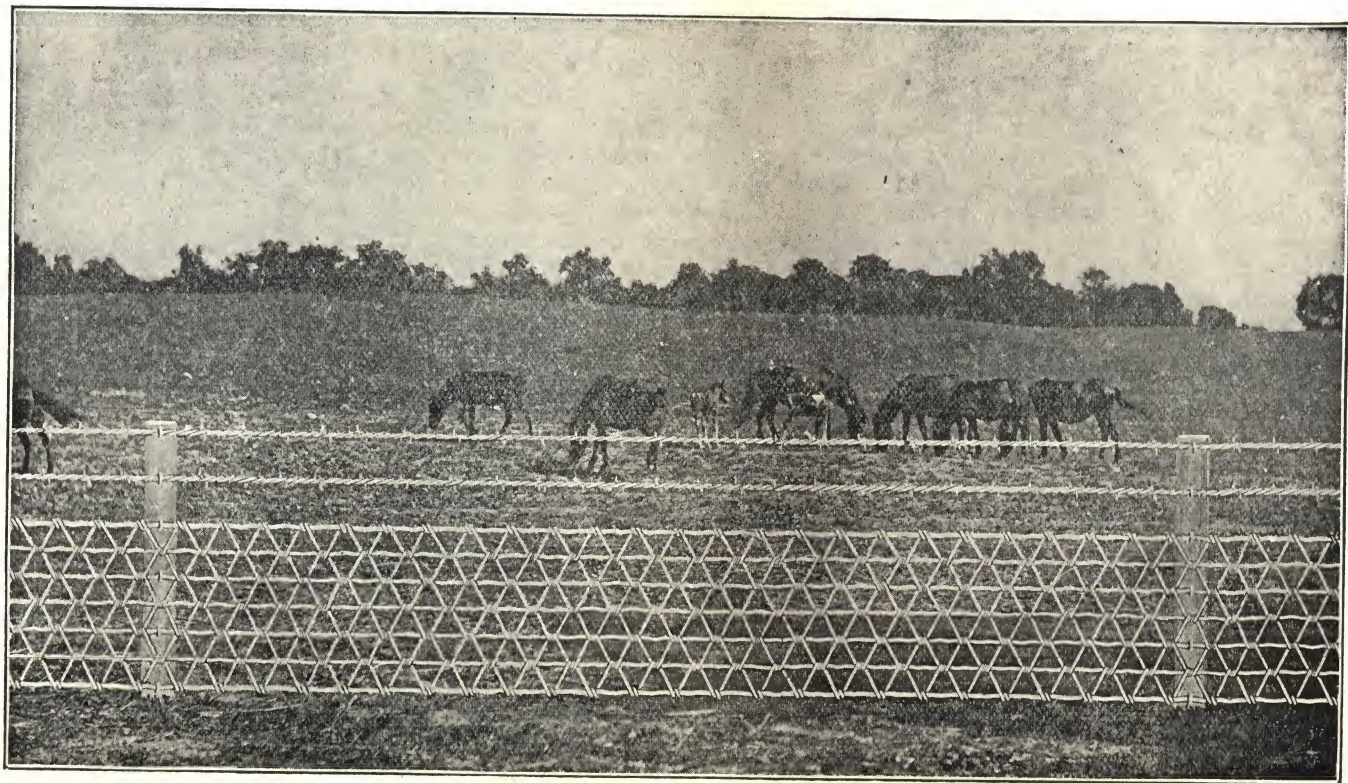
We call your attention to this as a matter of explanation why the

Kitselman Woven Wire Fence thus Aluminized and galvanized offers such a perfect resistance to rust and corrosion, remaining unaffected by climatic conditions long after other fence, not thus treated, has lost much if not all its coating. It is likewise additional evidence of our persistent effort to contribute to the excellence of our product instead of cutting here and there in order to lower the cost of production at the expense of long life and usefulness, which is rightfully yours.

The buying of a Kitelman Fence gives you the advantage of this Aluminized process of galvanizing without additional cost to you, and since it is a matter affecting the durability of the fence it should enlist your earnest attention. In discussing fence with your neighbor, we would appreciate your calling his attention to this feature.

Feast and Famine.

Although we are in the midst of good times, it is well not to overlook opportunities to economize. The problem of fence is one of the most difficult presenting itself to the farmer for solution. Likewise, it is an item requiring no little expenditure, and it is well to figure closely. Here is where we extend a helping hand. A fence that will not in a lifetime require displacement, yet cost you no more than a fence of less strength and utility, is certainly worthy of thoughtful consideration. It is because we make a good fence that we are enabled to argue in this manner. If our efforts had been directed toward a cheapening process, using soft wire instead of High Carbon, cheap galvanizing spelter instead of commercially pure, we could not lay claim to superiority with a boldness inspired by confidence. Buy a Kitelman Fence, in which merit is always predominant.



TEXAS HOG FENCE.

Texas Coiled Spring Hog Fence.

WE call your particular attention to this fence. The margin wires are No. 11, and the intermediate line wires No. 14, all **High Carbon Coiled Spring Steel Wire**; the mesh wires are No. 16; all wires are heavily galvanized. This fence was intended for use along young or imperfect hedges. It is being used, however, quite extensively as a general purpose hog fence. It is not as strong as our Standard Hog Fence, but with two barbed wires above, it makes a very good light stock fence.

Reward of Trust Combinations.

We are now reaping the reward of trust formations. During the time great combinations were being formed we were led to believe that everything would be cheapened. We have not been disappointed in one respect at least—the cheapening of the product in quality.

Prior to the formation of so-called trusts, the independent manufacturers had a reputation to maintain, and the only way to do it and hold their trade was to produce high grade goods. When the combinations took place, and many mills came under one head, or management, the incentive for manufacturing a first-class product gave way to rivalry among the mills as to which could furnish the greatest production. This rivalry was encouraged by the management in many ways; one was to offer rewards to workmen of the mills producing the greatest output in a given time. When the high water mark of production was reached the workmen learned that they were expected to continue likewise, and as evidence of their ability to do so, the management would point to what had been done. The workman had no alternative but to do their best to produce a given production per day or month. Can you imagine how the quality of goods could be improved under such a process? On the other hand, are you surprised at the cheap quality of goods, and complaint from consumers all over the country?

Weight of Fence.

Our weights are obtained by taking the average of several hundred rolls of each style and height. The process of drawing wire will sometimes slightly modify weight, especially in rolls containing as much as 20 or 40 rods. For this reason we do not guarantee weights to be absolutely correct, but they are approximately so.

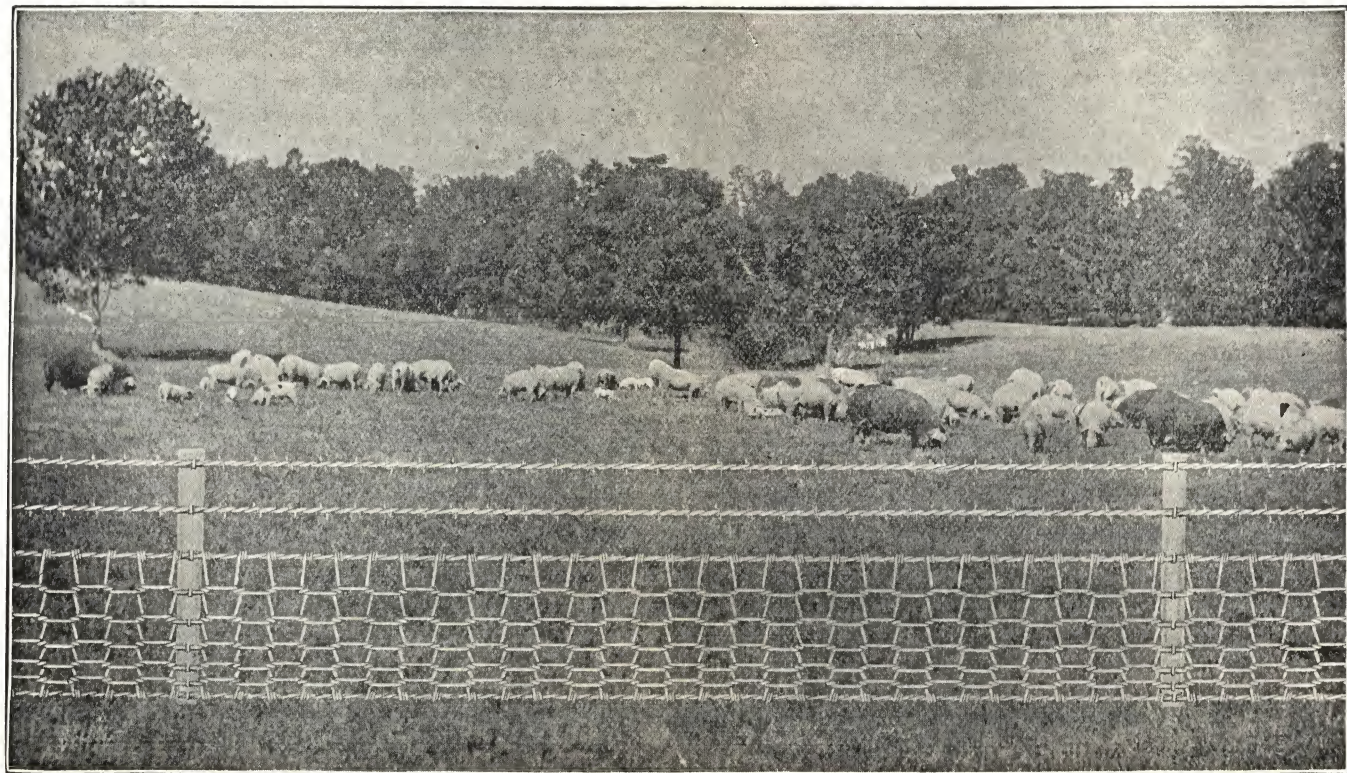
The Disregard of Trusts.

Whoever heard of a trust being formed for the benefit of the consumer? The first thing was to discharge many of their best employes, reduce the wages of many they kept, and increased to large proportions the salaries of officers and heads of the combination. Secondly, cut the cost of production in every way possible and increase the tonnage or output; all to the detriment of the quality of production. Did they reduce the price to the consumer? No; they advanced the price and kept it there until mills were built by outsiders and compelled them to reduce prices by their competition. Then they reduced prices to a point where they thought would run all competitors out of the business. When business is good they advance prices and make the consumer pay all they can. When business is dull they reduce prices to induce the dealer to stock up. This, however, is to benefit the dealer, and not the consumer.

The Use of Stays.

We recommend the use of wood or wire stays every eight feet. For wood stays, take two ordinary slats, such as are used in picket fences; place one on each side of the fabric, and drive wrought nails through both of them, one just above the bottom wire, one just below the top wire, and as many intermediate as deemed necessary. You will find these of great advantage in preserving the uprightness of your fence, keeping intermediate wires in position, and the mesh wires at tension.

Under competent supervision, it is just as easy to make good galvanized wire, as poorly galvanized wire, but it takes more time and spelter, therefore, is more expensive.



UNIVERSAL HOG FENCE.

Universal Hog Fence.

THIS style was designed especially for a Hog Fence, but when used in connection with barbed wires, as shown in illustration, it is suitable for turning all kinds of stock. The construction is such that it is impossible to slip or spread the line or stay wires. Twisted cable for top margin. Barbed wire for lower margin. Stay and intermediate line wires are No. 12½, heavily galvanized. Stay wires are 6 inches apart. Spaces between line wires are graduated from 3 inches at bottom to 6 inches at top.

Angular vs. Sharp Twist.

In many mesh fences, especially those in which the mesh wire runs straight up and down, the twist around the line or intermediate wires is a sharp, kinked twist, thus destroying to a certain extent the texture of the wire and breaking the galvanizing coat. This not only weakens the wire, but allows the process of rust to begin immediately at a point where strength and durability are most essential and important.

This is not the case in our Diamond Mesh Fence. On the contrary, the mesh wire approaches the line or intermediate wires at a very long angle and is tightly wound or wrapped around the line wire instead of being kinked or twisted.

By this manner of wrapping instead of sharply twisting the mesh wires, we avoid weakening the wire at the point of intersection with the line wire and leave the galvanized coat unbroken.

As a matter of course, it is the direct contact of air and moisture with the steel through the broken galvanized surface that begins a process of rust and corrosion, and the action of the rust is hastened and facilitated because the fibre of the wire at the point of kink or twist is broken and porous. Our long angular wrapping avoids both the weakening of the mesh wire and preserves the galvanized coating unbroken, thus rendering this part of the fence as durable as a straight wire.

The life of a fence can be no longer than that of its weakest point. The Kitzelman Fence presents a solid front of strong features, and will give you longer service than it is possible to secure from any other make. These and other commendable points of excellence explained throughout, are our reasons for soliciting and anticipating your patronage.

Saving of Posts.

Every fence, no matter what its style or make, should have a sufficient number of posts to insure uprightness and resistance, but it is a fact worthy of comment that the Kitzelman Fence requires fewer posts than other makes, and the reason is plain. The Kitzelman Fence has a greater number of line wires, and these line wires pass through the center of diamond shaped meshes, thereby increasing its strength to at least three times greater than ordinary fabrics. The line wires thus bound together have much the resistance offered by a board set upon edge. Hogs cannot raise it to go under though posts are as far as 32 feet apart. The wind does not affect it, and if stock crowds against it the fence returns to its original position because of its great elasticity, while no injury results to staples or posts.

Climatic Condition on Galvanized Wire.

No matter how carefully wire is galvanized or how good the quality of spelter used, it will last a great deal longer in some climates than in others. If in a section of the country where there is a great deal of alkali, or in the vicinity of furnaces producing sulphur fumes, it will not last as long as where these conditions do not exist.

Clubbing Together.

It is not an unusual thing for farmers living in the same vicinity to club together and order fence. We give special quantity discount, and by permitting some one to place the order for the aggregate number of rods desired, it enables all to secure the reduction. Our price list gives the discount on quantities.

High Carbon Self-Regulating Coiled Spring Fence

Disastrous Effect of Sharp Twists.

One of the most destructive methods adopted by some manufacturers of Woven Wire Fence is that of closely wrapping the vertical stay wires around the line wires in the making of certain styles. You cannot fail to be interested in the following illustrations and explanations if you contemplate the purchase of Farm Fence.



It must not be forgotten that while wire has great tenacity there is a limit to this virtue, and any process of manufacture which implies a radical twisting or bending must necessarily break or rupture the wire fibre, thus leaving it weakened and exposed to rust and corrosion. The fence cannot be stronger than the wire which forms it, and any process of manufacture which weakens the wire must weaken the fence correspondingly. Neither is a weakened fence the only result; its durability is affected, because a broken wire and galvanizing surface hastens decay.

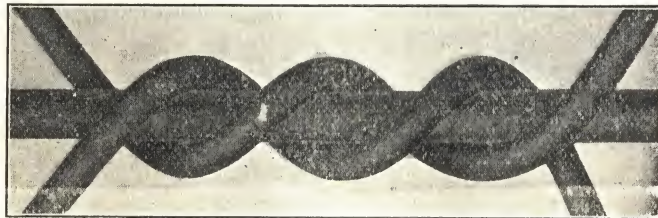
In explanation of the foregoing, notice the illustration above. This is an actual photographic reproduction of a section of fence, in which a No. 12 vertical stay wire is closely wrapped around a No. 11 line wire. The illustration is only magnified about four diameters, but the disastrous effect on the wire is so apparent as to occasion both surprise and comment. The galvanizing coat is partially destroyed, the fibre of the wire stretched and separated, thus affording a place for the retention of moisture, and insuring the immediate beginning of the process of rust at a point where the greatest strength is imperative.

This rupture of wire is due to the close wrapping of the wire around

so small a diameter as a No. 11 wire. The inner surface of the coil must crumple and compress, while the outer surface of the coil, which is three times longer than the inner surface, must be stretched to conform to this greater distance, which necessarily breaks and separates the outer surface of both the wire fibre and galvanizing coat, as is plainly shown in the photographic illustration.

You can admirably illustrate by taking a green stick and bending it around a small cylindrical surface. Watch the bark crack and separate, which illustrates the damage done the galvanizing coat on the wire. As you continue to bend the stick, watch the wood fibre splinter and separate, and you will get a good illustration of the damage done to the texture of the wire when subjected to this radical treatment.

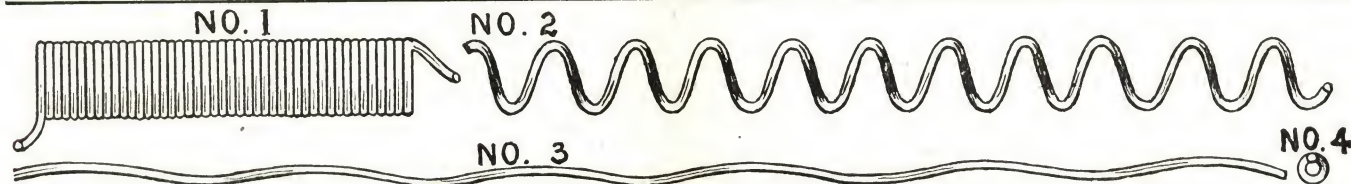
In our Diamond Mesh Fence this damage is completely avoided by the elongated twist, which permits a close, perfect wrap of the mesh wire around the line wires, but without damage to either the mesh wire or its galvanizing coat.



The above illustration is also an exact photographic reproduction of a section of our Diamond Mesh Fence, which has been erected and doing service for more than two years. This is likewise magnified about four diameters, but no trace of rupture is discernible, and the galvanizing coat is as perfect as when drawn from the spelter pan.

This is certainly conclusive to any logical mind, and a strong argument in favor of the long life and service as well as the admirable method of construction of our High Carbon, Coiled Spring Fencing.

High Carbon Self-Regulating Coiled Spring Fence



Coiled Spring Wire.

The above illustrations are made use of in order to explain how any one can make and test the elasticity of **Coiled Spring Wire**. To make the test easy, take a piece of No. 16 or 18 wire and wrap it around a $\frac{3}{8}$ or $\frac{1}{2}$ inch bar of round iron with the coils close together as shown by illustration marked No. 1. Then fasten end in a vise or secure to some other object and take hold of the other end with a pair of pliers and pull on same. It will at once assume the form shown by illustration marked No. 2, and pulling all you can it may appear that you have pulled all the coil out of it, but on releasing the strain it will assume the shape shown by illustration No. 3 and if you sight along the wire as you would a gun barrel it will look like illustration No. 4; that is, the coil being so regular it has the appearance, when sighting along it, of a tube. **Such is Coiled Spring Wire.** It can be tried with soft wire, but even with soft wire it will be impossible to pull all the coil out of it. This being the case with soft and such small wire, try to imagine the strength and superior resisting power of the large **High-carbon Coiled Spring Steel Wire** used in our **Coiled Spring Fencing.**

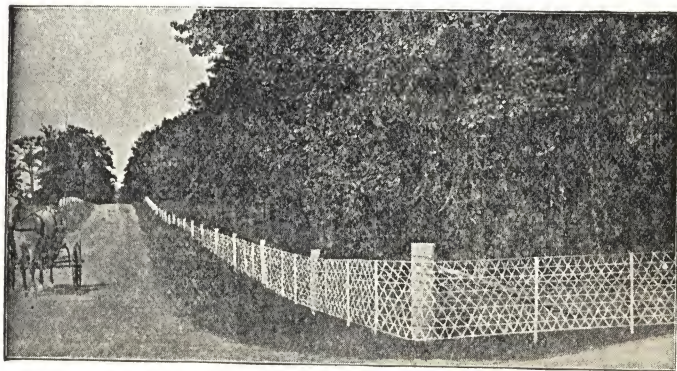
We have built up our mammoth business by winning and sustaining the confidence of the people. We have taught the public to understand that they can return anything they buy of us and secure the money paid for it. We accurately describe everything we manufacture and studiously avoid misrepresentation. We realize also, that an article must be seen to be fully appreciated, and for this reason we do not consider a sale closed until you have received and examined the article purchased. If it is fence you buy, we even permit its return after erection, if you are dissatisfied in any particular. By this plan we have annually increased our business and have hundreds of letters complimenting us upon the spirit of fairness manifested in every transaction, and expressing complete satisfaction. We will deal with you on the same fair and liberal basis, and would appreciate the opportunity to do so.

FULL SIZES OF WIRE		Gauge	Weight 1 Mile Pounds	Feet Pound
●		9	306	17.24
●		10	255	20.70
●		11	202	26.18
●		12	154	34.25
●		13	118	44.64
●		14	89	59.17
●		15	72	73.00
●		16	55	95.24
●		17	41	129.87
●		18	31	172.11
●		19	24	232.22
●		20	17	312.50

High Carbon Self-Regulating Coiled Spring Fence

Endorsed by State Institutions.

The Experimental Farms, Colleges, and Stations, maintained by the different states, are Institutions of great value to the farmer. It is their mission to conduct experiments along scientific lines and place their seal of approval upon matters affecting the welfare of the farmer. Among the many Institutions of this class which have had occasion to use the Kitzelman Fence, and have contributed their endorsement of its utility and integrity of manufacture, are the following: State Experimental Farms of West Virginia, Montana, Minnesota, Virginia, Indiana, Illinois, Missouri, Mississippi, and Louisiana. To these are added St. Leo Military College, St. Leo, Florida; Winthrop Normal and Industrial College, Rock Hill, South Carolina, and Board of Control of State Institutions, Des Moines, Iowa,



Our Fence, used by school for Feeble Minded Youths, Ft. Wayne, Ind.,. We are under obligations to Supt. Alexander Johnson for photograph.

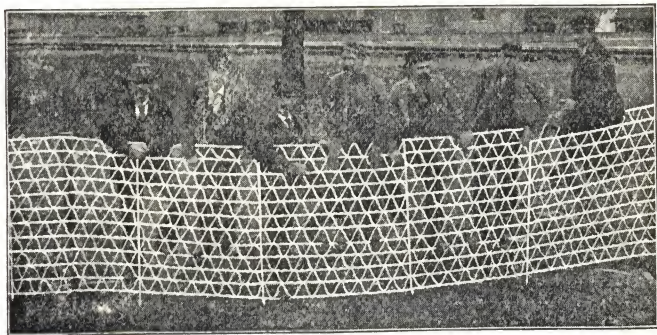


Mr. Frank H. Hall, Superintendent of Illinois Institution for the Blind, Jacksonville, Ill. kindly sent us photo from which above was reproduced, and wrote as follows: "I beg to say that your Fence is very satisfactory. I believe you have the best wire fence on the market."

Making Corn Crib.

Many farmers throughout the western states are using our Woven Wire Fence for making corn cribs, a use to which it can be easily adapted. Posts are set so as to describe a circle as large as desired for crib, and the fabric is stapled on inner side of posts. If a post is planted in the center of circle, extending above the outer wall of the crib, it will form an admirable support for a roof. These cribs can be made to an increased height by using two widths of fabric. A crib in Champaign County, Illinois, made after suggestions herein, has a capacity exceeding 12,000 bushels. The cost is trifling and it will last for many seasons. If a square crib is desired let middle post on opposite sides extend upward to receive cross plate for roof support.

High Carbon Self-Regulating Coiled Spring Fence



The above is a reproduction from an actual photograph of a panel of Kitzelman Fence supporting seven men whose combined weight was more than 1,200 pounds.

A Portable Fence.

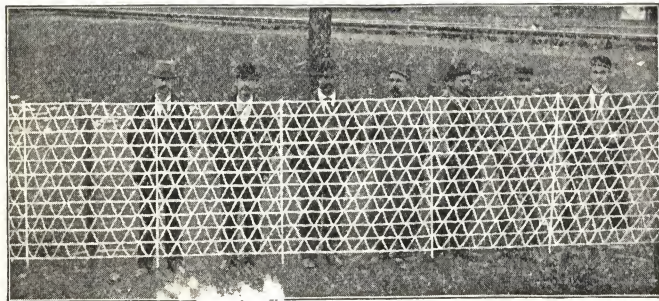
You can erect either style of our fence any place, up, down, or over hills. Should you have occasion to move it a dozen or more times it will go up the last time as easily as the first. Portability is a quality not often found in woven wire fencing. It is one of the many advantages of ours. The **Coiled Spring Wire** does this.

No Ratchets Needed.

Don't use ratchets; they are a nuisance. You do not care to be bothered taking up and letting out your fence, at every change of temperature. Life is too short; use **Coiled Spring Wire**. It will do all that ratchets will do, and without your assistance or attention. It will work day and night, winter and summer, equalizing the strain and prolonging life of fence.

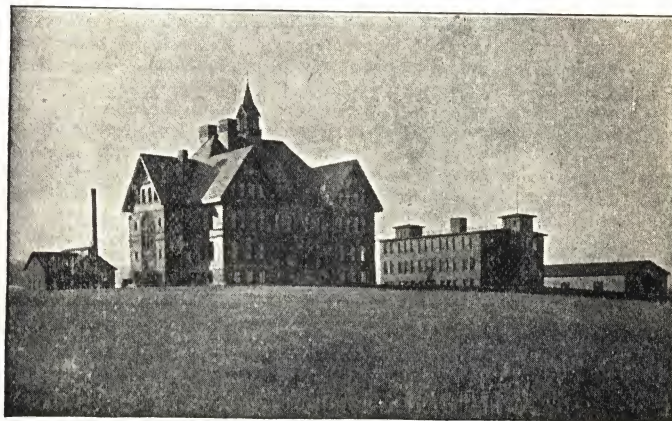
Amount and Grade of Spelter Used.

In galvanizing Wire the greater number of mills use from 50 to 60 pounds of spelter per ton of wire. We use from 90 to 120 pounds per ton. Good, prime Western Spelter costs 5 cents per pound; sometimes more, sometimes less, but 5 cents is a fair average. Figuring on a basis of 90 pounds, which is the minimum amount we use, and 30 pounds greater than the maximum amount used by many other manufacturers, it is apparent that it costs us \$1.50 more per ton. This means a great saving to mills having a capacity of 400 to 500 tons daily, but it means, also, a great sacrifice in the quality and durability of the wire they produce. The poorly galvanized wire put out by many manufacturers and almost universally condemned by farmers all over the country, is not due wholly to inferior quality of spelter, but in using too little, and by doing it so rapidly, that the various processes can not perform their work efficiently.



This picture shows the same panel immediately after being relieved of the weight.

High Carbon Self-Regulating Coiled Spring Fence



Montana State Agricultural College.

(Located at Bozeman, Montana.)

The following is copied from Bulletin No. 14 issued by the Directors. Comment is unnecessary.

SWINE PASTURE FENCE.—To profitably produce pork the farmer must pasture swine, both old and young. This necessitates a pig-tight pasture fence. Of materials employed for fence construction, lumber is perhaps the best. However it is expensive in its first cost and subsequent maintenance, and its tendency to collect snow-drifts makes it objectionable. Wire fences are cheaper and more durable. We have tried swine fences made of thick-set barb wire, wires three inches apart, tightly stretched, stapled to posts 16 feet apart, with stakes between posts four feet apart. It would seem that such a fence would turn the pigs, but it did not. The cuts and scratches caused by the wires heal rapidly on swine, and the

little fellows would wriggle through indifferent to the barbs. Later we have used a fence made of smooth wire, three different sizes, woven into a close-mesh fence by the Kitzelman Brothers, Muncie, Indiana, and makes a neat, strong, substantial fence; one that will turn any domestic animal.

There is as much difference between soft wire and our **High Carbon Coiled Spring Steel Wire**, as there is between pine and hickory timber so far as strength and toughness are concerned.



Mr. T. J. Harris, West Liberty, Iowa, an enterprising, progressive farmer, who makes a business of raising fine hogs and has accumulated a comfortable fortune thereby has 1,200 rods of Kitzelman fence on his farm. The picture above shows our fencing that has been up nearly six years.

High Carbon Self-Regulating Coiled Spring Fence



Holding the Key to the Situation.

Here's an honest farmer holding the "riches of fabled kings" in his arms. It is the business of the pig to eat more corn, to grow more fat, to bring more money, to fence more land, to raise more corn, to feed more pigs, to grow more fat, to bring more money, to fence more land, to raise more—he's a debt payer and a mortgage lifter.

The Substantial Manufacturer.

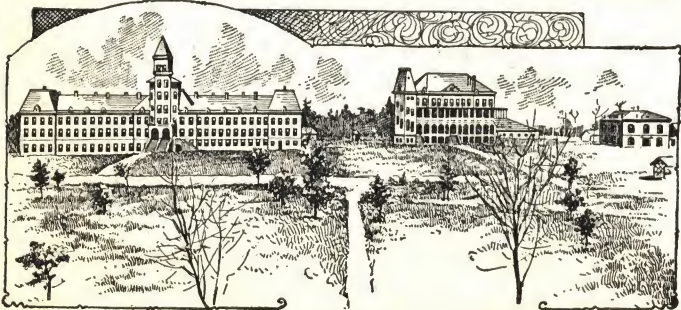
The substantial manufacturer of a staple necessity builds in anticipation of the future. He selects his location carefully, builds substantially and permanently, expends large sums of money in the installation of machinery, all of which would be entirely useless unless kept active. He must have patronage. It is not a matter of choice, he MUST have it to

keep his employes at work, his machinery in operation, or suffer great financial loss.

This patronage must be a steady growing trade. To win and sustain it, he must manufacture a good and substantial article fully worth the money asked for it, and he must deal with his far-away customers with the same consideration, fairness and exactness, fulfill every guarantee, carry out every agreement with the same cheerfulness as though standing in their presence.

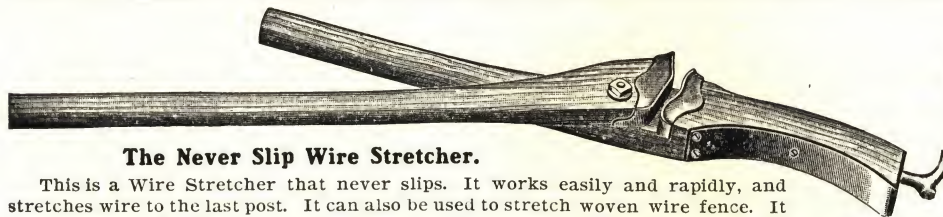
To such a manufacturer comes business. His plant is kept active, he realizes a profit upon his investments, his trade, though hundreds of miles away, speak of him with the same degree of courtesy and confidence as that imposed in the reliable merchant in your own locality.

For seventeen years we have manufactured fence and sold it direct to the consumer. Our customers are in every state in the Union, as well as in Mexico, Canada, South Africa, Australia and other foreign countries. We have won and maintained this growing trade by manufacturing a substantial fence, and guarding the interests of our customers with the same fidelity that we guard our own.



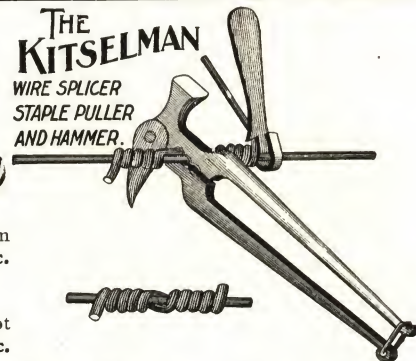
Mississippi Agricultural and Mechanical College, which has adopted and is now using our fence.

High Carbon Self-Regulating Coiled Spring Fence



The Never Slip Wire Stretcher.

This is a Wire Stretcher that never slips. It works easily and rapidly, and stretches wire to the last post. It can also be used to stretch woven wire fence. It has the required grip but does not injure galvanizing on wire. It can be operated by one man. Can be used either as a wire stretcher or staple puller. Simple as a pair of tongs. Price, each,.....75c.



The Kitzelman Wire Splicer, Staple Puller and Hammer.

A Wire Splicer is one of the handiest things you can have about the farm. The one we offer is not only the best but a combination tool of great utility. Made of high grade malleable iron. Price 50c.



Cronk's Wire Pliers and Benders.

This surpasses any plier on the market for cutting and bending wire, and can also be used as Hill's Hog Ringers. They are especially adapted to farmers' use in building wire fences, etc. They cut barbed wire, barbed belt or any kind of wire used for fencing purposes. By passing the wire through the pliers the wire is held after it is cut.

8-inch, each,.....	55c.	By mail, each,.....	67c.
10-inch, each,.....	70c.	By mail, each,.....	90c.

Wire Pliers and Staple Pullers.

This fence tool is needed by all who build or repair wire fence. It is made with two staple pullers, two hammers and two Button Cutters. They are of the same weight (1½ lbs.) as the No. 1½ Maydole Hammer, and are made from the best forged steel. Price, each,.....80c. By mail, each,.....\$1.00.



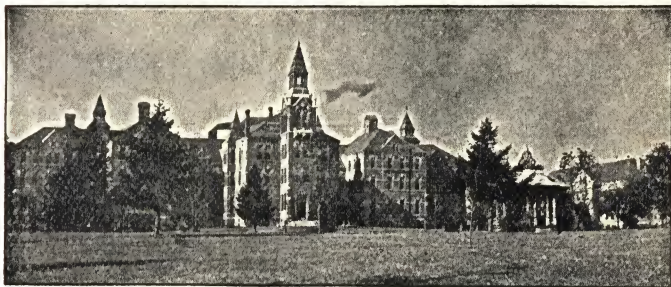
Cronk's Pruning Shears.

A trial will convince any one that these Pruning Shears will do the work easier and better than any shears on the market that costs twice or three times as much. They are solid steel and fully warranted.

Price, each, by mail, post-paid,.....50c.



High Carbon Self-Regulating Coiled Spring Fence



The State of Illinois is to be congratulated on having such a model institution as the Illinois State Agricultural College, Lincoln, Ill., with a faculty so eager to investigate and employ all the newest ideas and inventions for the betterment of the farmer. Our fence is used there and its benefits were fully demonstrated, greatly to the profit of Illinois farmers.

Best Fence Obtainable.

SHIDELER, INDIANA, June 22, 1903.

Kitselman Bros.:

Gentlemen:—I am entirely satisfied with your make of woven wire fence. I find it just as represented, and I think it is the best farm fence obtainable. I have been using it for about three years; put up 80 rods more this spring.

Yours truly,

WILL. H. YOHEY.

We Sell Direct to the Farmer.

We have no expensive traveling men, neither do we employ agents. Our price to you is but one small profit above actual cost to manufacture. This enables us to sell you a high grade fence at a price much below that asked by other manufacturers for similar fences.

Does Not Rust.

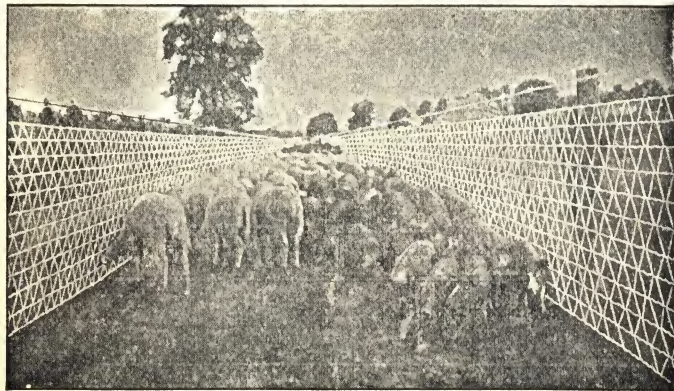
PATTERSON, N. J., June 24, 1904.

Kitselman Bros.:

I bought 20 rods of your Hog Fence about 3 years ago and I am very well pleased with it. I put two wires on top and it turns any kind of stock. One thing I have noticed, it is unlike a great many fences: I see it shows no signs of rust, which proves you are using good material. I like the looks of your Extra Heavy Farm Fence sent me; I think it is an improvement on the other. When in want of more fence will send you the order.

Yours truly,

J. R. HAVER.



A lane traversing the farm of Mr. J. D. Kennady, of Jordan, Kentucky, is fenced with Kitselman Fence. Note the uniform and substantial appearance.

High Carbon Self-Regulating Coiled Spring Fence

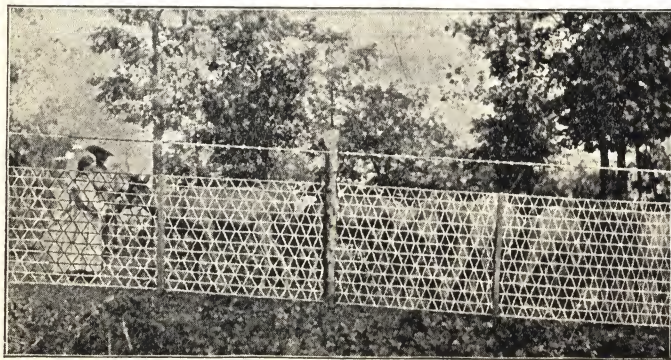


The accompanying cut shows the store rooms of John Burns & Co., in Auckland, New Zealand, the energetic agents for our Coiled Spring Fencing. The popularity of our fence in this far-away country is fully attested by the increasing demand of land owners, who are compelled to fence against the invasion of rabbits and kangaroos.

How to Erect Our Coiled Spring Fence.

When the posts are ready to receive the fence, unroll it on the ground, the bottom of the fence next to the posts. Lift up the end to the first post and staple line wires to the posts with two or three good staples. Be careful to staple the fence well around on the back of first post. After stapling one end to post, go to other end, put on the stretcher and pull the fence tightly in place. There is no danger of the fence

breaking, so be sure and give it a good tension. It is a good plan to temporarily staple the fence at top and bottom to each post, but in doing this do not drive the staples entirely in, for you must remove and replace them before the fence is sufficiently tight. In completing your fence do not drive the staples entirely in on the line posts, but so the line wires will work loosely; this is the best for the fence, for in case of a strain at any point it is equalized or distributed over the entire fence. In going over hills it is best to go to the highest point and hang the fence up by the top wire with a staple closely driven into the post, which will prevent fence from crushing on top of the hill. Where it leaves the ground too far in a hollow, put your foot on the bottom wire and bring it into place, stapling it to the post; place your staples so that the fence can be stretched a few inches without pulling them out by contact with the mesh wires.



Elk Park of Mr. D. L. Friend, Elk Park, Mo., enclosed with Kitzelman Coiled Spring Fence.

High Carbon Self-Regulating Coiled Spring Fence

The Kitzelman Post Hole Auger.

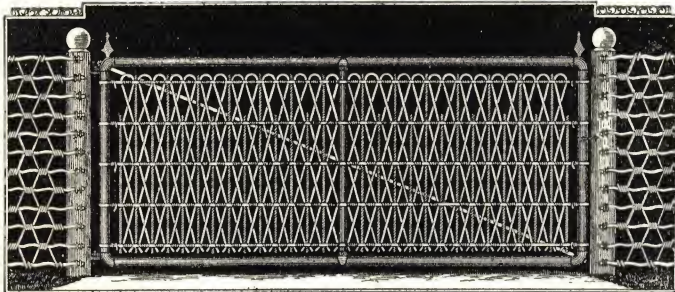


This auger is unexcelled for easy, rapid and efficient work. Faults so common to earth augers have been successfully overcome. The fittings are malleable iron, the blades spring steel. The dumping mechanism, entirely new, is simple, but so effective that the most tenacious soil is discharged without trouble, obviating the necessity of pounding on the ground or using a stick to free the dirt. The blades being radially adjusted, holes varying in size from 6½ to 8 inches can be bored. Guide marks on disc head allows the accurate setting of blades. This is a feature found in no other auger. In ordinary soil 150 to 200 three-foot holes can be made per day.

Mr. C. A. Tatman, Monticello, Ill., President State Board of Agriculture, writes: "My men have been using your **Post Hole Auger** and pronounce it by far the best auger we have ever used. We would use no other. We can dig more holes and do it easier than with any other auger we ever used."

Patents on Fence.

We own and control patents on Woven Wire Fencing wherein **Coiled Spring Wire** is used for the line wires, and also wherein barbed wire is used for the margin wires, so that our customers are fully protected on what they buy of us. We also wish to give warning against the purchase or use of a Woven Wire Fence having **Coiled Spring Line Wires or Barbed Margin Wires** not of our make or licensed by us. All will be held liable to the full extent of the law for infringement upon these patents.

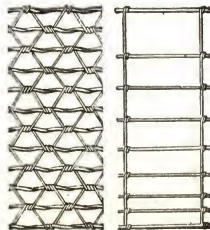


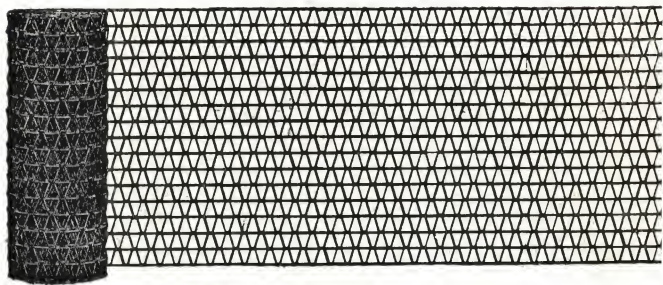
Farm Gates.

We make our Farm Gates especially strong. They are likewise ornamental and durable. The Fabric is a very pretty design, and so closely woven that it will turn small pigs and chickens. The frames are made of Steel Tubing 1½ inches in diameter, and diagonally braced by strong wire cable. The frame is also supported and strengthened by vertical brace in center. If width exceeds ten feet, two vertical braces are used.

The adjacent illustrations are designed to show the relative compactness of our Diamond Mesh Coiled Spring Fencing when compared with the open square mesh styles with vertical stays.

Each section represents one foot of fabric used in the construction of the two styles. It is a convincing argument in favor of our Diamond Mesh and the fence buyer needs only to use his eyes to reach the conclusion that for strength, compactness, and utility in the matter of turning stock of all kinds, our Diamond Mesh Fencing stands pre-eminent.



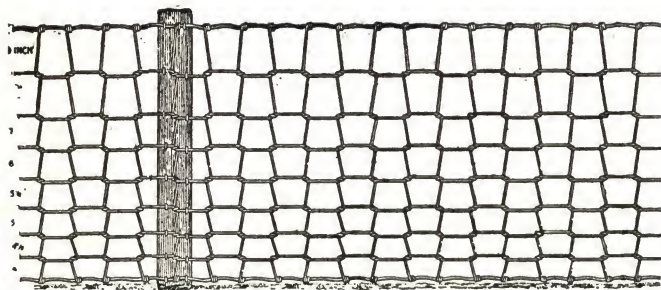


"NO-SAG" POULTRY NETTING.

"NO-SAG" Poultry Netting is exactly what its name implies and is entirely new in the line of poultry netting. Its chief distinction is the **LINE WIRES** running through each mesh or diamond, the mesh wires at their points of intersection being twisted together and around the line wires, forming a very rigid and substantial network. Margin wires No. 14, line and mesh wires No. 18, all heavily galvanized before weaving. Line wires 2 1-2 inches apart, 2-inch mesh.

This is strictly a "NO-SAG" poultry netting as the combination of the line and mesh wires, closely woven, prevents any lengthening of the fabric or narrowing between the posts.

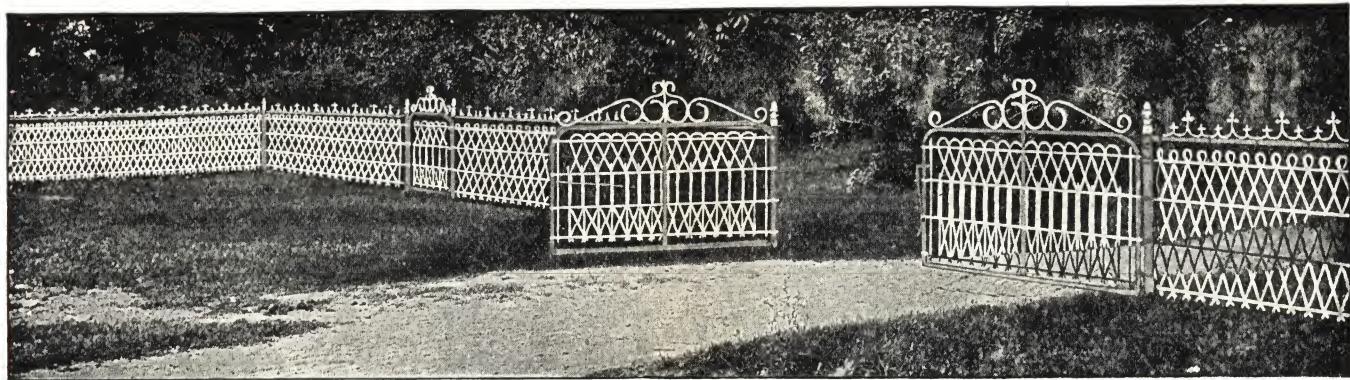
No baseboard or top rail required and posts can be placed twenty feet or more apart with perfect safety. This saving of lumber almost equals cost of fabric. These features of no sagging, no bagging, no narrowing between the posts, or no lengthening of the fabric in stretching, together with the saving of posts, baseboard and top rail, place "NO-SAG" Poultry Netting a long stride beyond the Old Hex mesh netting, which never fails to narrow or lengthen in stretching.



UNIVERSAL FARM FENCE.

Our Universal Farm Fence, as illustrated above, is constructed in such a manner that it readily adjusts itself to the uneven surface of rough or hilly ground. The margin wires are No. 9 **High Carbon Coiled Spring Steel Wire**; intermediate line wires No. 12 and stay wires No. 12 1-2, Bessemer steel wire, all thoroughly and heavily galvanized. The intermediate line and stay wires are firmly twisted together at their points of intersection, making it impossible to slip in any direction. The twist is formed at an angle of about 45 degrees, an arrangement that not only enables the fence to be stretched to a perfect tension, but admirably provides for contraction and expansion. Great strength is obtained by the use of double-strength High Carbon Coiled Spring Steel Margin Wires, thus making it a very durable and servicable fence.

Spaces between the line wires are graduated from 4 inches at the bottom to 9 inches at the top, and are as follows: 4, 4 1-2, 5, 5 1-2, 6, 7, 8 and 9 inches. Stays 6 and 12 inches apart.



Kitselman Ornamental Fencing.

How to beautify a home is a matter which should receive much consideration. While appropriate furnishings within conduce to our pleasure and comfort, the surroundings are likewise of great importance in determining our spirit of enterprise and conception of the beautiful.

Well kept lawns or small yards, dotted here and there by flower beds and bits of shrubbery, are essential in completing the scheme of attraction, but the whole should be surrounded by an Ornamental Fence which will not only lend an added charm to the adornment in general, but give protection and exclusiveness to the inclosure. Cultivation of flowers, vines, and fruits may be then not only enjoyed but protected.

It is a fact worthy of special mention that the Kitselman Ornamental Fence enjoys the distinction of standing alone in the matter of symmetry and originality of design. It has a dignity that is at once noticeable, and elicits a praise and inquiry that is not excited by any other make. There is a gracefulness in every style of fabric, a sort of majesty in every post and rail, while every feature of ornamentation is in decided harmony with the general contour.

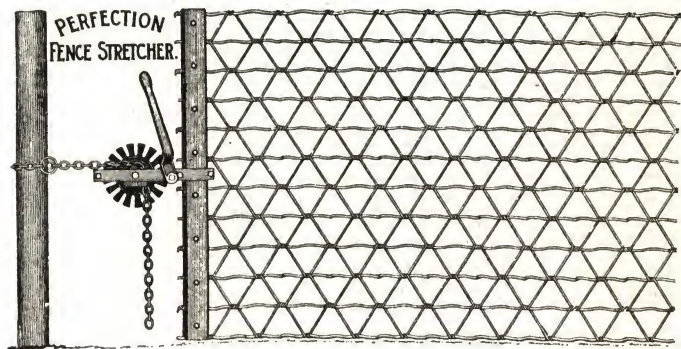
In the construction of the Kitselman Ornamental Fence we use only the highest grade of steel tubing for posts and tubular top-rail, and furnish all fittings of malleable. The corner, end, and gate posts are made from large and extra heavy tubing that they may not only bear the extra strain that devolves upon them, but lend strength and rigidity to the entire fence.

Our line, end, gate, and corner posts are fitted with anchors, which enable them to be driven into the ground, or have cast bases to be fitted into holes bored or dug to receive them. Either style will be furnished at same cost. It will be well to designate the kind wanted, as where no designation is made we will exercise our preference in filling the order.

Our fabric is made from pickets formed by twisting together two No. 12, heavily galvanized Bessmer steel wires. These pickets, after being shaped, are overlapped and intertwisted with the cable wires by a series of right and left twists, forming a strong, firm fabric.

We have a 32-page Catalogue of Ornamental Fence, beautifully illustrated and containing full description of every style of Fence we make, which we will gladly mail free upon request.

High Carbon Self-Regulating Coiled Spring Fence



The accompanying illustration shows in detail the **Perfection Fence Stretcher** as well as the manner of applying it to the posts and fence fabric. It is very powerful, simple and easily operated. It never slips and is self-locking, if desired, at every half-turn of the lever. Wood clamps and eleven feet of chain go with each stretcher, thus enabling one to pull the fabric about nine feet at each fastening to post.

Has a Double Twist.

In our **CELEBRATED COILED SPRING FENCING** all mesh wires at their points of intersection have a **DOUBLE TWIST** around the line wires thus forming the strongest twist and strongest wire net work known. Every wire and every twist is a brace to all other wires and to all other twists throughout the full height of the fence.

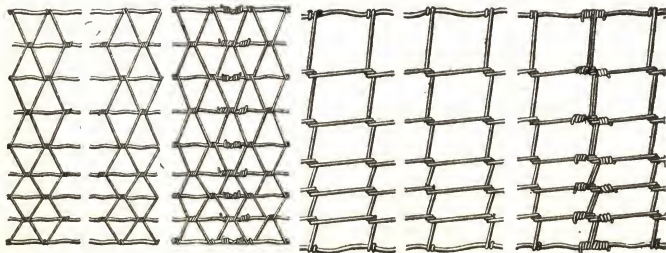
A Thing of Beauty, a Joy For Many Years.

If you erect our **COILED SPRING FENCE** on your farm, it will not only be a thing of beauty, but a joy for a greater number of years than could be obtained from the use of any other fence on the market. Besides, the service rendered as a barrier against all kinds of stock, would be a constant reminder of your good judgment in buying.

No Fence Laws.

Many states have laws that require stock to be kept up—that is, one needs fence to keep in and take care of his own stock and not to keep the stock of others out. By taking advantage of this law a farmer can get along with very little fence, but can he afford it? It is not so much what it costs to fence a certain field or what is saved by not fencing it. The question is, what is the pasture of that field worth to you? By being able to pasture it with horses, cattle and hogs you not only save all the valuable pasture for one year, but year after year right along. You also save a great deal of care and labor and a lot of valuable feed you otherwise have to use. Have you a single field on your farm that you can afford to let go unfenced? Figure it over and we are quite sure you will find the saving and profit arising from having your farm and fields well fenced will amount to many times the cost of the fence. It is not so much what a fence costs, but what it will save you. Well fenced fields are like the interest on money loaned on first mortgage security—sure returns every year.

Splicing Fence.



Before Splicing. After Splicing. Before Splicing. After Splicing
The above illustrations show how easily our **Standard Coiled Spring Fence** or our **Universal Hog Fence** can be spliced. In making the splice be careful to have it neatly done, and the ends of the wires wrapped tightly around the line wires so as to insure great strength.

Our Boyhood Days on the Farm.

There is a sacred hallowedness clustering around a birthplace that increases in interest and endearment with each passing year. A quaint old home, with a broad expanse about, with simplicity marking every nook and corner, where sunlight and shadow have untrammelled freedom, where pure atmosphere and simple environment conduce to health and strength, making all play work, and all work play,—what a capital place is a rural home for a natal spot and subsequent formation

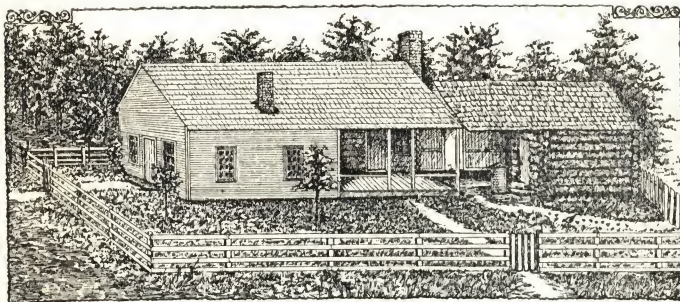
of rugged youth.

It is a long stretch of memory that carries one back over a busy life to the scenes of birth and childhood, but it loses none of its interest because the return pathway is strewn with failures and successes, sorrows and pleasures, disappointments and achievements.

There's an army of friends abiding in every state in the union, even in foreign countries, which has had a part in our achievement, and this little touch of boyhood history is given because it is dear to us, and we modestly hope that our friends, even in a small measure, will share the sentiment that suggests it, and perhaps recall the days of their own childhood with pleasure.

If these lines should come within the thoughtful consideration of the boy on the farm, let us say for his encouragement that there is a decided advantage accruing from his country birth and environment, and this advantage stands as the author of the country boy's ascendancy. He may not know it, but the simple life and solitude of the farm is the hot-bed in which is grown the plants of opportunity, and, if he is diligent, manhood's approach will find him with such a concentration of energy that failure grows thin and pale under the shadow of his well defined purpose. Once let the wholesome young man of the farm set his head toward the accomplishment of an ideal, and the resoluteness of Leonidas at the pass of Thermopylae dwarfs into feebleness. All because he was born and reared in the solitude and purity of the American farm home, where work is imperative, where glamour makes room for reality, where vice is a stranger and virtue a companion.

It is little wonder that history so repeatedly records the boy on the farm drifting into a manhood that helps to shape the affairs of municipal and state; that finds a place in judicial and executive functions; that become wise counselors in time of peril, and bulwarks in time of defense. When great things are to be done, give us the man who grew out of a boyhood on the farm, and in whose bosom fidelity is a virtue, honesty a principle, and lofty ambition a spur to nobler endeavor.



Farm Home and Birth Place of A. L. and D. M. Kitselman.



D. M. Kitselman. (1865) A. L. Kitselman.



A. L. KITSELMAN.

With the inception of our industry, we incorporated these two virtues, believing that if a man be inspired, not only to faithfully toil, but also to strive for the highest degree of attainment, there could be no limitation to his success other than that fixed by his own capabilities.

We came out of a home where honesty was not a policy, but a principle, and where deceit could find no hiding. Out of our labor, out of our striving for the highest degree of perfection in fence construction, out of our fair and candid treatment of every customer that placed an order with us, has grown a business unsurpassed in magnitude by few fence manufacturers in the world.

Our claims for your patronage are based upon the assurance that we are to-day conducting our business on these same cardinal principles,—making fence of varied utility,—making it as

THE KITSELMAN BROTHERS.

We do not write about ourselves from a standpoint of self-laudation, but purely from a business significance. By those who have patronized us in the past, our manner of conducting business is fully understood, and confidence fully established.

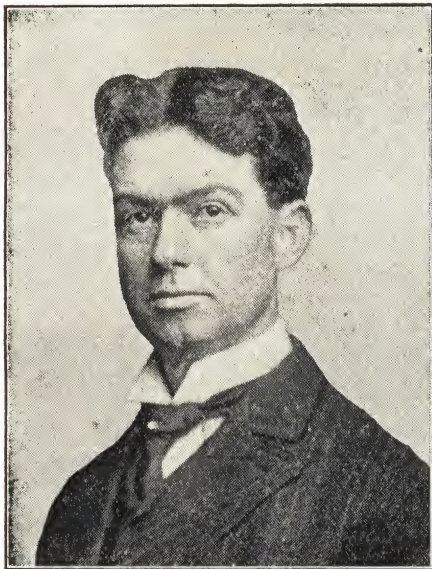
This catalogue, however, is being mailed to many who have not yet favored us with their patronage, and that they should know something of the firm who invites their confidence is our only apology for personal comment.

Our business rests wholly upon the degree of confidence which the public may repose in us. It is self-evident that we will receive no business from those who doubt our integrity, or who entertain a fear that they will not be accorded fair treatment. Therefore, it is incumbent upon us to establish such a degree of confidence that will open a way to business relationship. When we shall have received the first order we will have an opportunity to prove ourselves worthy of patronage. To those with whom this relationship is not established, we must give evidence of our worthiness.

The firm of Kitzelman Brothers was organized in the early 80's, and started at the very bottom of the ladder. We could not now put our office in what was then our office, factory and wareroom. We knew how to work however, because we were born on the farm where work was imperative, and the first lesson taught us by an industrious parentage was, "There is no excellence without labor." We were likewise taught that every effort should have our best endeavor or it was ignobly performed.



D. M. KITSELMAN.



E. F. KITSELMAN.

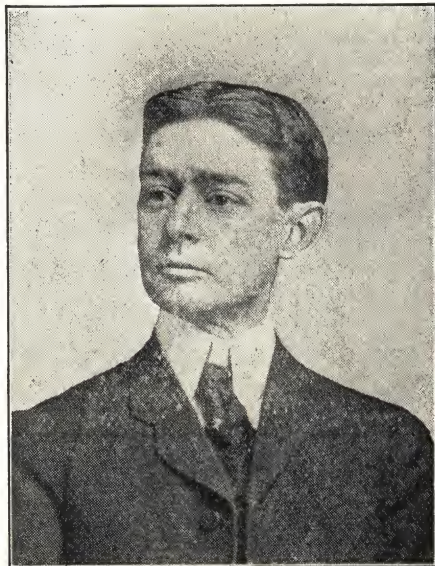
E. F. Kitzelman, Secretary of the firm as recently incorporated, has grown up in the business and caught the inspiration from the older brothers. Work with him is a pleasure and he lends his approval to nothing unless it bears the imprint of skillful execution. He is the sole of honor and endorses merit so heartily that he believes the success of the business in the future, as in the past, must rest upon maintaining the merit in Kitzelman Fence just a little higher than competition can reach. Being socially inclined, he is also a member of the various secret organizations.

C. M. Kitzelman, Treasurer of the recently incorporated organization, is eminently fitted by business training for this official capacity, and exhibits a pardonable pride in the success he has helped to attain. He is energetic and enthusiastic and has the same social and fraternal relationships enjoyed by the other brothers. He is likewise a stickler for an honest product.

good as it is possible to make it with skilled labor and faultless material.—selling it under such an open, candid, and liberal guarantee that leaves the matter of acceptance wholly with the customer. Back of all this guarantee is the fortune and integrity of the four Kitzelman Brothers.

A. L. Kitzelman, inventor of the several different styles of fence and all of the special machinery for its manufacture, is President of the organization, now incorporated, and gives the business the same personal attention that was manifested in its infancy. He is also President of The Rock Oil Company, Winchester, Ind., and The Ridgeville Gas Co., Ridgeville, Ind., Vice President Muncie Gas Engine and Supply Co., Muncie, Ind., Director of the Columbus Natural Gas Co., Columbus, Ohio, Merchants National Bank, Muncie, Ind., Peoples Loan and Trust Co., Winchester, Ind., Johnston-Woodbridge Glass Co., Indianapolis, Ind. and Nelson Oil Co., Independence, Kansas. In a social and fraternal way he is a member of the Muncie Commercial Club, an active Mason, Elk, Knight of Pythias, and Odd Fellow. A man who places a high regard upon honor, and who personally insists that this virtue must be made a part of every business transaction.

D. M. Kitzelman, Vice President, is the junior member of the original firm of Kitzelman Brothers, and has shared the toil and the credit equally with A. L. Kitzelman. He is a man of indomitable energy, who is supremely happy when he is devoting his hours to the growth and betterment of the industry in which he is wholly absorbed. He is also a member of the organizations of Elks, Knights of Pythias, and Odd Fellowship, and has made integrity of dealing a part of every business transaction.



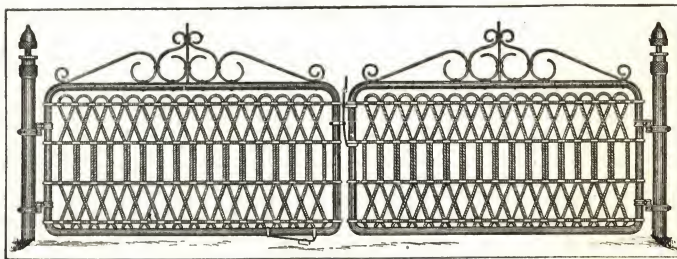
C. M. KITSELMAN.



Ideal Barbed Wire.

Our Ideal Barbed Wire is made of two No. 14 galvanized Bessemer steel wires twisted together, with barbs 3 inches apart. It is put up in 80-rod spools and sold by the spool. It will stand a breaking strain of 912 pounds. As the barbs prevent stock pressing against the wire, the efficiency of same is in the barbs as much or more than in the strain it will stand. While the Ideal will not stand the actual strain it gives quite as good satisfaction as the heavier and more expensive barbed wire and is therefore fast coming into general use.

KITSELMAN LAWN GATE.

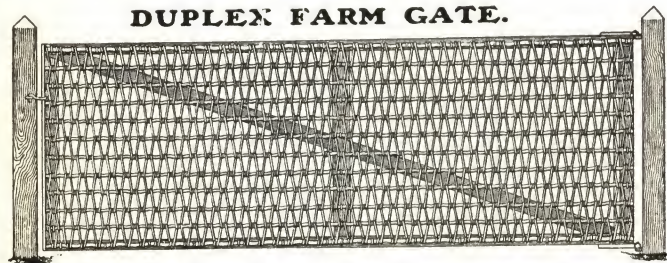


Above illustration shows our double Ornamental Lawn Gate which is made of first-class material. Strong, durable and cheap. Frame is made of 1½ inch outside diameter steel tubing; fittings of malleable and wrought iron. Can be used in connection with any kind of fence and on wood, iron or stone posts. Being highly ornamental they enhance any property as well as give best service. Single walk of lawn gate same in every way as one of the gates shown in above illustration. Hinges and latch for either wood or iron posts furnished with each gate.

Eureka Barbed Wire.

Our Eureka Barbed Wire is made of two No. 13 galvanized Bessemer steel wires twisted together, with barbs 3 inches apart. put up in 80-rod spools and sold by the spool. The breaking strain is 1136 pounds. The weight and strength of this wire is between the light and heavy wire and gives fully as complete protection in every way as the regular or heavier barbed wire. It satisfies in every way those who prefer heavier wire than our Ideal and is being used quite extensively.

DUPLEX FARM GATE.



We use first-class material throughout in the manufacture of the Duplex Farm Gate. Rear upright 4x4. All other wood parts 2x4. Covered with our Extra Heavy Poultry and Stock Fence Fabric and solidly stapled to frame and upright brace, making it Horse-high, Bull-strong, Pig- and Chicken-tight. Hinges, hook and eye are wrought and malleable iron. Hinges are bolted to top and bottom of frame, thus relieving rear upright from carrying weight of gate. Frame painted red. **Made one size only.** Length 12 feet; height, 50 inches. Weight, 100 lbs. Price does not include posts. Posts should be set 12 feet and 4 inches apart. Made rights and lefts. Illustration above shows Right. If you wish fabric on the other side, order left.

High Carbon Self-Regulating Coiled Spring Fence

Combination Fences.

A combination of barbed wire with a woven wire fabric makes a very good and cheap fence—a fence in fact, far superior to many now in use throughout the country. We manufacture and price two styles of barbed wire by the spool of 80 rods, so that it is very easy for anyone to figure the cost of a combination fence complete. As an aid to a selection, however, we suggest a few combinations.

STYLE NO. 34 with three barbed wires, 7, 15 and 24 inches above the 20-inch high fabric, makes a 50-inch high fence.

STYLE NO. 36 with three barbed wires, 7, 15 and 23 inches above the 27-inch high fabric, makes a 50-inch high fence.

STYLE NO. 61 with three barbed wires, 7, 15 and 24 inches above the 24-inch high fabric, makes a 48-inch high fence.

STYLE NO. 30 with two barbed wires, 7 and 16 inches above the 33-inch high fabric, makes a 49-inch high fence.

STYLE NO. 37 with two barbed wires 7 and 16 inches above the 32-inch high fabric, makes a 48-inch high fence.

STYLE NO. 38 with two barbed wires 6 and 14 inches above the 36-inch high fabric, makes a 50-inch high fence.

STYLE NO. 31 with 1 barbed wire 8 inches above the 40-inch high fabric, makes a 48-inch high fence.

The higher the woven wire fabric used in a combination the better the fence, but our aim is to enable our customers to secure a fence for the purpose desired at the lowest possible cost. Any of the above mentioned combinations will make a fence that will turn all kinds of farm stock. A combination fence enables one to put up a hog and stock fence and use in connection with the woven wire fabric any old barbed wire used in other fences. When an all-woven wire farm fence is desired we sell more 47 and 50-inch than of any other heights although some want fence even higher than these heights.

How to Send Money by Mail.

There are many people, who would like to buy direct from manufacturers, who are not familiar with the easiest and safest methods of making remittances. It is an easy matter, yet sometimes simple things are not well understood. If making the remittance to us, anyone of the following methods are safe:

Post Office Money Order.—Take the money you want to remit to your Post Master and tell him that you want a Money Order, naming amount, payable to Kitselman Brothers, Muncie, Indiana. It is not necessary for you to sign this order. Enclose it in your letter just as your Post Master gives it to you.

Express Money Order.—Express Money Order is secured by paying the amount to your express agent, who issues and gives you an order payable to us for the amount desired. This you do not have to sign. Enclose it in your letter just as the agent gives it to you.

Bank Draft.—You can pay the money to your Banker and get a Bank Draft payable to us for the amount you wish to send.

It is not necessary to sign a Post Office or Express Money Order, or a Bank Draft made payable to us, nor is it necessary to send in a registered letter for safety. Send under regular two cent postage. No danger of losing your money if sent in either of the above ways, for if the Order or Draft should be lost or destroyed in transit, a duplicate order or draft can be secured.

The cost of Post Office Money Orders or Express Money Orders is as follows: \$2.50 or under, 3 cents. Over \$2.50 and not exceeding \$5.00, 5 cents. Over \$5.00 and not exceeding \$10.00, 8 cents. Over \$10.00 and not exceeding \$20.00, 10 cents. Over \$20.00 and not exceeding \$30.00, 12 cents. Over \$30.00 and not exceeding \$40.00, 15 cents. Over \$40.00 and not exceeding \$50.00, 18 cents. Over \$50.00 and not exceeding \$60.00, 20 cents. Over \$60.00 and not exceeding \$75.00, 25 cents. Over \$75.00 and not exceeding 100.00, 30 cents. Bank Drafts cost from 10 to 25 cents, owing to amount.

Registered Letters.—If you cannot get a Bank Draft, Express, or Post Office Money Order, send the money in a registered letter. Then if the letter is lost or stolen it can be traced. All Post Masters are required to register letters whenever requested to do so.

High Carbon Self-Regulating Coiled Spring Fence

Terms and Instructions.

While we are very anxious to ship fence on 30 days' trial, we must so conduct the business as to be assured the payment of bill or return of the fence.

Farmers are not rated in Commercial Reports and we therefore have no means at hand of knowing their standing. Should we be favored with references we would necessarily have to write before shipping the goods. In our busy season we sometimes get as many as a thousand orders in a single day. To make inquiry regarding the standing of even half of them would not only require a large increase in our office force, but would result in our having thousands of delayed shipments and unfilled orders on hands. We have therefore adopted five plans of shipment and payment, either of which fully safeguards our own as well as the customers' interests and which avoids any unnecessary work or delay in shipment.

PLAN NO. 1—Full amount with the order and when full amount is sent, **3 per cent cash discount** may be deducted.

PLAN NO. 2—Thirty per cent. of amount of bill with the order and balance Sight Draft through your nearest bank for collection on arrival of goods.

PLAN NO. 3—Send full amount of bill to The Merchants' National Bank, Muncie, Indiana, to be held by them on deposit pending the 30 days' trial of the fence. (See blank form of letter, page 32.)

PLAN NO. 4—Deposit full amount of bill with your banker and have him fill out and sign the Certificate of Deposit, shown on page 40.

PLAN NO. 5—Have your banker write us on the regular letter head of the bank, that you are perfectly good for your contracts and that we run no risk of loss, and we will be pleased to ship whatever fence you may need direct to you, to be paid for, if satisfactory, after 30 days' trial.

We know you are, and we want you to feel, that, should you send the full amount with the order direct to us, you are sure to get your money back if for any reason the fence fails to give satisfaction and is returned—in fact our \$25,000.00 Indemnity Bond, doubtly assures you, (See reduced in size copy of Indemnity Bond on page 2 and copies

of letters from banks on pages 3, 4 and 5.) No bank would give and permit us to make use of such letters in our catalogue if we were not in every respect worthy of it.

By sending full amount with the order, as per Plan of Purchase No. 1, you save not only the **3 per cent cash discount**, but all exchange and collection charges as well. It also relieves us of considerable work and bookkeeping, which is necessary in keeping track of open accounts if goods are ordered under either of the other plans.

Remittances—Make all remittances by Chicago or N. Y. Draft Express or P. O. Money order. Do not send Individual Check without adding 25 cents for collection.

Make Orders Brief—Do not order fence in the middle of a long letter. Orders and letters are attended to by different clerks in our office. Make out your order by itself, and if you wish to write any thing do so on a separate sheet.

Name and Address—Be sure to sign your name to every letter or order, and give name of Town, County, and State. We frequently receive letters we cannot answer for want of this.

Prompt Attention—We acknowledge all orders by postal as soon as received. If you do not receive our acknowledgment promptly notify us.

Weight and Freight Rates—We carefully weigh each shipment, taking every precaution against error, and deliver all shipments to the railway company in good condition, taking their receipt for same. We secure a through Bill of Lading for each shipment, also the lowest possible Rate of Freight we are able to secure to your place. If there should occur any damage to shipment enroute, shortage, weights changed or overcharge in freight, have railroad agent note same on freight receipt, and in case of change in weight have agent re-weigh shipment in your presence and note same on freight receipt before paying any additional charges. Send us the bill of lading and freight receipt showing condition of the shipment or payment of freight charges in addition to the amount prepaid by us, and we will remit the amount of such additional charges direct to you, as the papers you return will enable us to collect the amount from the railroad company.

If you wish to deposit the purchase price in The Merchants' National Bank during the 30 days' trial of the fence, as per Plan of Purchase No. 3, fill out the following and send direct to the bank with the amount.

BANK DEPOSIT LETTER

FOR USE OF CUSTOMER

DATE _____ 190__

MERCHANTS NATIONAL BANK
MUNCIE, INDIANA.

Gentlemen:--

Enclosed please find _____ for \$ _____
which amount I deposit in your bank, subject to the conditions
named in my order to Kitselman Brothers; the money to be held by
you during a thirty day trial of the fence I am ordering. If the
fence proves satisfactory after 30 days' trial, the above amount
to be paid to Kitselman Brothers. Should the fence prove unsatis-
factory, I will send you railroad freight receipt showing return
of the fence, and on receipt of same the above amount to be
returned to me. Yours truly,

Name _____

County _____ P. O. Address _____

Railroad Station _____ State _____

If you wish to deposit the purchase price in a local bank of your own choice, as per Plan of Purchase No. 4, have your banker fill out and sign this Certificate and you send it direct to us with your order.

Certificate of Deposit.

Kitselman Bros.,

Town _____ State _____

Muncie, Indiana

Date _____

Mr. _____ has deposited \$ _____

with us in payment of _____

Said amount is subject to the following conditions; It is understood and agreed that purchaser is to have free use of the fence for 30 days from the time of its receipt. If this 30 days' use and test is satisfactory, then the purchase money becomes the property of Kitselman Brothers.

If for any reason the fence is unsatisfactory, the same to be rolled up in good shape and delivered to railroad freight agent, taking therefore the usual freight receipt from the railroad agent.

We agree to hold the money during the 30 days' trial, which trial dates from the time of the receipt of the fence. If at the end of that time Mr. _____ has not returned the fence as agreed in the order, this money to become your (Kitselman Bros.) property and we will remit same to you promptly by New York, Chicago or St. Louis Draft **without charge for exchange.**

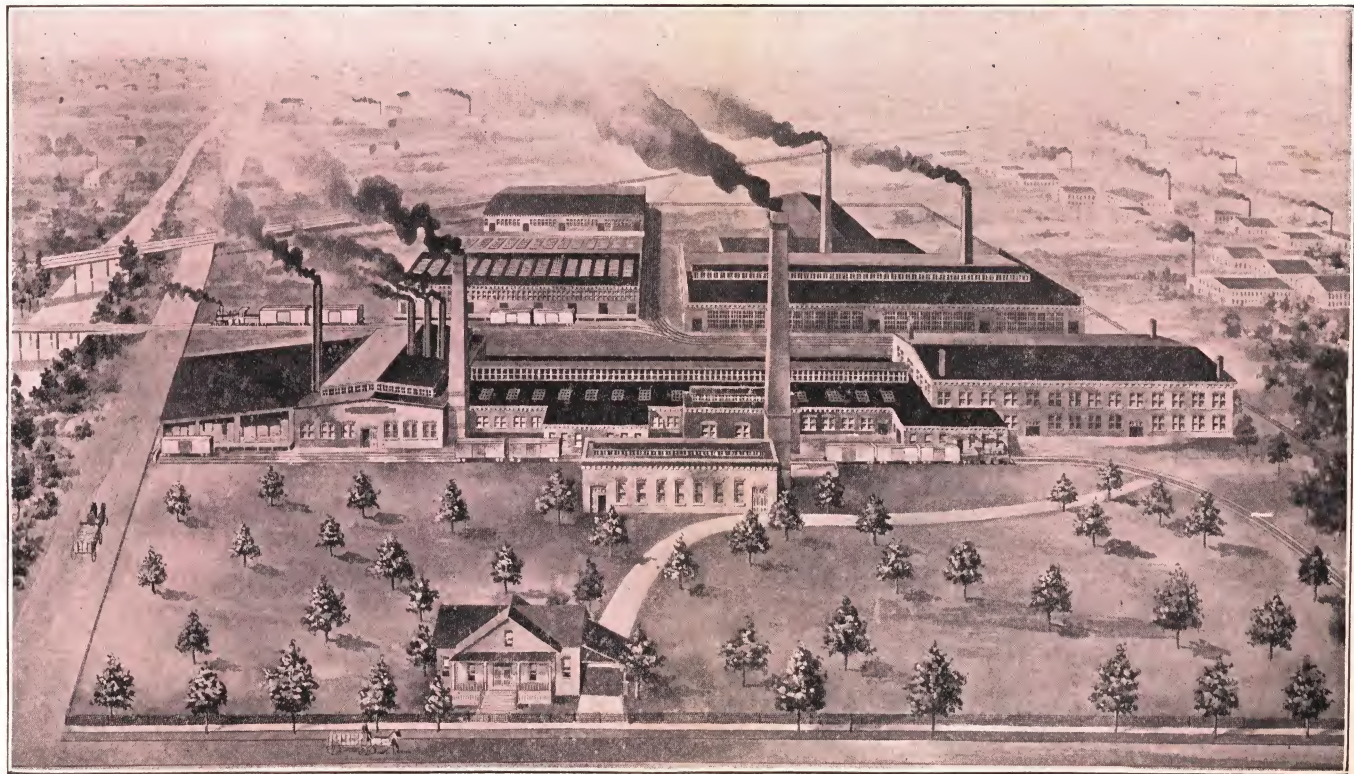
If Mr. _____ returns the fence to you, we will return the money deposited to him, upon his delivering to us railroad shipping receipt showing the same has been returned to Kitselman Brothers, Muncie, Indiana. In such case we will notify you at once of the fact, and send the shipping bill to you.

☒ This deposit is subject to draft at the end of the 30 days' trial

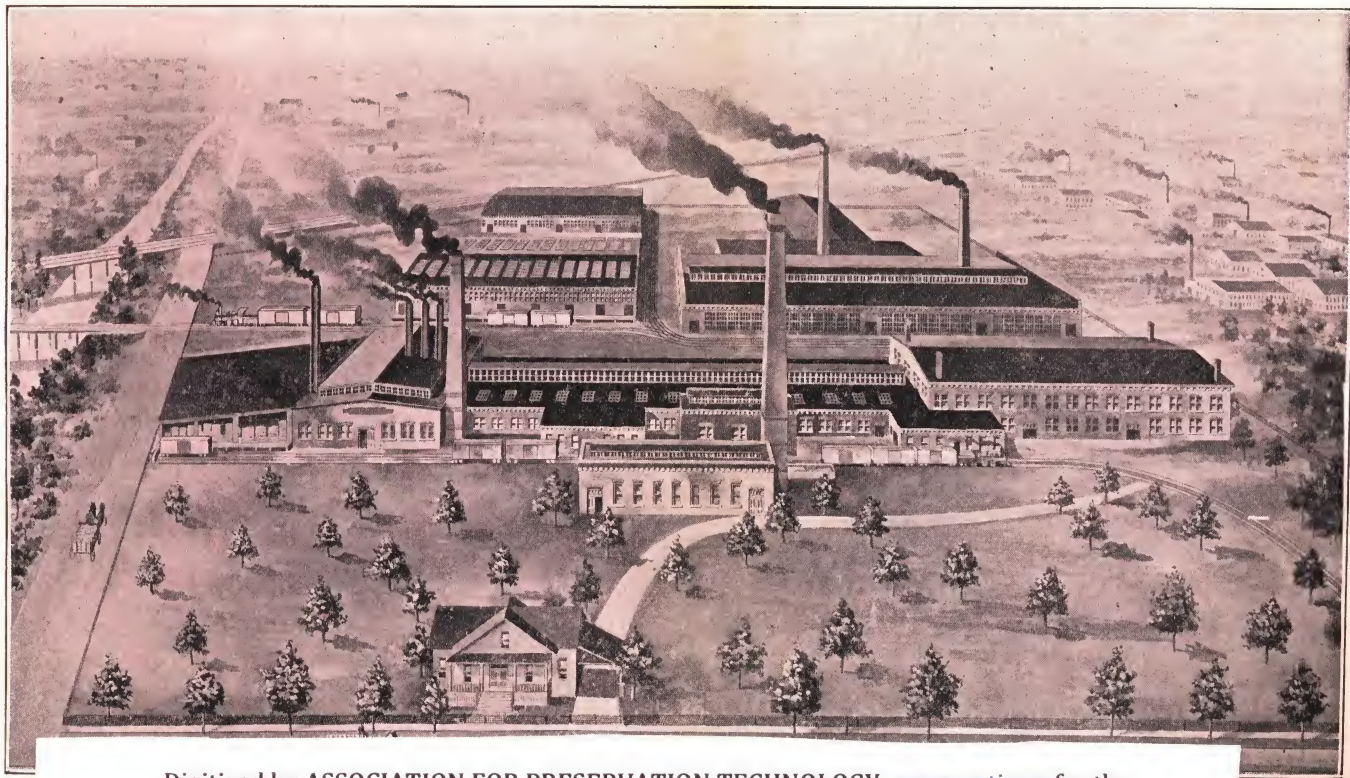
Signed _____

NAME OF BANK

NAME OF BANK OFFICIAL



Wire Mill of Kitseiman Brothers, Muncie, Indiana.



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